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## Editorial Notes

THE trite statement that we live in exciting times may be understood in various ways. Most people would understand it as looking forwards to a holocaust, and the prospect, though no doubt exciting, is apt to be depressing and to encourage a 'couldn't-care-less' attitude. In this context it refers to discoveries about Man's past, not to his future prospects. The best advice to those suffering from the prevalent epidemic of pessimism is to stop looking forwards, for after all 'it may never happen', and to look backwards at what actually did happen when the civilization we talk so much about was young and full of promise. Archaeologists of course have their heads permanently fixed in this position, and it is a fact that amongst them it is very rare to find one who 'couldn't-care-less'. The excitement of new discoveries crowding one upon another fires the imagination and gives a zest to life. One may be momentarily depressed by the prospect of annihilation, but one realizes that, even if 'it' should happen, most of the new knowledge (and much beside) will survive into a new era. Archaeologists deal wholesale in time, and there is a lot of it available before the sun grows cold.

There has been no lack of exciting new discoveries lately, and they have been duly reported in *ANTIQUITY*. Miss Kenyon has added a new chapter, the first, to the history of art. We call it the first because the Jericho heads are the earliest known examples of representative art and presumably ancestral to all that followed; whereas the palaeolithic cave-art, though earlier in point of time, seems to have died out. The main line of descent of all modern art is to be traced in the civilizations of the east and of the Mediterranean region. Incidentally one wonders whether there may not be an ancestral relationship between the Jericho heads and the alabaster portrait-heads placed in the Old Kingdom mastabas of Egypt? Though these may be as much as 2000 years later, they certainly had a ritual significance, as the Jericho heads probably had also. An alternative explanation would connect the Jericho heads with the mesolithic skull-burials of Ofnet and with head-hunting.

The most exciting recent discovery in Britain is that made at Stonehenge by Professor Piggott and Mr R. J. C. Atkinson and reported briefly in the *Times* (July 16th). It is that one of the great Trilithons there are carved the representations of a bronze dagger and bronze axe-heads. The dagger is not of the well-known Wessex type (though the axes are) but is square-shouldered with a narrow blade like the early Mycenaean daggers of the 16th century B.C. An actual dagger of later Mycenaean type was found in a round barrow at Pelynt, Cornwall, a little before 1845, but remained unrecognized until it was spotted in the Truro museum a few years ago by Professor Childe (*Proc. Preh. Soc.* for 1951, p. 95). The Pelynt dagger, he says, may 'be accepted as an actual import from Mycenaean Greece. From the type's chronology there, it could

have been brought hither at the same time as the celebrated segmented fayence beads. So it not only provides welcome confirmation of the reality of Aegean trade with the tin land, but also satisfactorily supplements the Egyptian evidence for dating the circulation of the beads, and so the floruit of our Wessex culture, between 1400 and 1300 B.C.' Other links with the Aegean region may be found, as Professor Piggott reminds us in a letter, in the ingot of tin from Falmouth harbour, which is of a Mycenaean type, and the gold cup from Rillaton, copying shaft-grave types. It may be added that the Pelynt barrows are a compact group that is unique in Cornwall, and that they lie close to but just outside (north of) the linear earthwork called the Giant's Hedge which delimits a beach-head between Fowey and West Looe (see *Archaeology in the Field*, pp. 186, 242). Close by them runs a ridgeway, connecting Polperro on the English Channel with the main central ridgeway at Temple on Bodmin Moor. These collocations may be accidental; the date of the Giant's Hedge is unknown. What is most needed is a careful re-excavation of the Pelynt barrows, and an attempt to date the Giant's Hedge by excavation. This latter will be difficult because the hope of finding dateable objects in such an earthwork is not a good one.



The conclusion to be drawn, it would seem, from these three facts is that not only did Britain have trade connections (which might have been indirect) with the Eastern Mediterranean region in the middle of the 2nd millennium B.C., but that some people from there actually came to Britain and carved representations of their weapons on Stonehenge. For natives would surely have carved native, not foreign, types of dagger. There is a further point of possible connection with the south-east. Stonehenge is unique in being built of *shaped* stones; and the method of shaping them, by battering with stone mauls, was the same as that used for the granite obelisks of Egypt. The marks of battering may still be seen near the base of one of the stones. Did the foreign visitors introduce this technique?



On another page (164) we publish a discovery that certainly points to the spread of the technical knowledge from the Mediterranean into the heart of Europe, though the date is a few centuries later. A hill-fort in Germany has been found to have a wall of sun-dried bricks. Such a thing has hitherto been completely unknown. The route by which the technique may have travelled is uncertain and the probabilities are about equally matched.



All these things show that travel in prehistoric times, whether by land or sea, was far more extensive than we are apt to suppose. Probably we are too much influenced by ideas derived from histories of exploration. For every explorer who has left a record of his voyages there must have been dozens who did the same journey but left no record. The history of the exploration of Africa is full of archaeological evidence, of every period, pointing to unrecorded penetration.



One of the most exciting bits of news is that the Minoan (Linear B) script has at last been deciphered. The achievement is a triumph of amateur archaeology of which we can all be proud, for it was made by Mr Michael Ventris, who has promised, with his collaborator, Mr Chadwick, to contribute an account which we shall publish in the next number of ANTIQUITY. Meanwhile we will only say that the language is ancient Greek.



# The Circumpolar Stone Age\*

by PROFESSOR GUTORM GJESSING

(University of Oslo)

IF one looks at a world map, or better still at a globe, one sees that Asia can easily be thought of as the central part of the world from which all other parts radiate—the Americas as well as Europe and Africa—whilst Indonesia and Melanesia provide a fairly good land bridge to Australia. In considering the Polar Regions it is important to realise that the Behring Strait has never been a barrier between the Asiatic and American continents. Eskimo live on a narrow strip of land on the Asiatic side, as well as along the coasts of the American Arctic, whilst those on the Diomed Islands in the middle of the strait up to recent times would sail in their skin boats to both Asia and Alaska in the summer, and travel thence by dog-sled in winter. Trade between the two continents has always been of considerable importance.

Yet it is strange that nowhere on the globe are there to be found prehistoric remains so closely related morphologically as those of North Norway, at one extreme of the land-mass, and those of the east coast of North America at the other. In Maine the archaeological inventory, belonging to the so-called 'Red Paint pattern' consists of spearheads, arrow-heads, and crescent-shaped knives, strongly reminiscent of the Eskimo *ulos*, but also very similar to the so-called boot-shaped knives of North Norway. Only a specialist in petrology can distinguish between these Norwegian implements and those of Maine.

In the rest of northeast America the cultural pattern, generally called the 'Eastern Woodland pattern', is somewhat different, characterised mainly by axes, adzes and gouges of exactly the same types as those found in such great number in North Norway (which are also well known in Finland, Northern Russia and Northern Siberia), as well as by pottery of different types obviously closely related to Asiatic and Northeastern European Stone Age pottery. In the Eastern Woodlands one has the so-called cord-marked pottery, which in types, technique and ornament is more or less identical with the north Eurasiatic comb-pottery as found in Finnmark in northernmost Norway, throughout Finland and the Baltic area, and in Russia and Siberia. One also finds the check-stamped pottery which is apparently related to the textile ceramics of Siberia and North Europe, although the techniques of decoration are different. Moreover in North Norway one does not find the true textile pottery, but a check-stamped ware of exactly the same type as that from the Eastern Woodlands.

Furthermore, in the Neolithic rock-carvings of northern Norway and Sweden which are chiefly representations of animals, quadrupeds and sea-mammals, fishes and sea-birds, as well as boats, the quadrupeds are often drawn with a line running from the mouth, through the neck, and terminating in a circular figure where the heart is usually supposed

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\* This paper is based on a lecture delivered in the University of Edinburgh in the Autumn Term 1952. Professor Gjessing, who is now Professor of Anthropology at Oslo, refers readers to the following account for more detailed factual information: Gjessing, G., *The Circumpolar Stone Age* (Acta Arctica 11), København, 1944. The paper has been edited for publication by Ian R. Whitaker.



to be. Over vast areas of North America, especially among the Algonquins, as for instance the Ojibway by the Great Lakes, or the Blackfoot, who in historical times lived close to the Rocky Mountains, and among the Zuñi Indians of the western Pueblos of Arizona, one finds exactly the same motif, there symbolising the heart and the 'life-line'. Among these North-Scandinavian rock-paintings are to be found several boats, clearly skin-boats of the Eskimo *umiaq* type.

The problem is thus a complicated one, particularly as the ethnological and folkloristic material apparently suggests some sort of mutual relationship around the entire circumpolar region, distinguished by shaman's drums, the bear-cult, hanging cradles, composite bows, special types of needle-cases, tailored skin-clothing of related types, the conical tent of the type best known from the Prairie Indians, and so on. The situation is further complicated by the immense geographical and chronological gaps in these vast areas, more or less uninvestigated by archaeologists. Moreover the ceramic types in question, the gouges and the folk-tale motifs, as well as other elements, are apparently unknown among the Eskimo, while on the other hand the skin-boat of the *umiaq* type, the predominant use of slate, etc., in historical times were unknown, or at any rate of small significance, in large areas characterised by these ceramic types, gouges and so forth.

The German ethnologist von Luschan has invented the very handy concept of 'convergence': that two cultures may develop towards greater similarity without being originally related, and without having connections with each other during the period of development. Naturally this concept has often proved a convenient means of escape from difficult problems of diffusion. Where, as more often than not, it is obviously unsatisfactory, the answer to our problems may be found in an inter-disciplinary approach in terms of physical and human geography, archaeology, ethnology, folklore, the study of religions and even linguistics, although it has not been possible to prove any linguistic connections through the greater part of the circumpolar area<sup>1</sup>.

Many archaeologists would object to making inferences from too many disciplines, since we are still affected by the 19th century ideal of scientific specialization: the ideal of digging one's own hole as deep as possible without bothering to know anything about what is happening in the neighbouring holes. Yet in circumpolar problems, the most cautious approach is that which draws from all possible sources.

In his most recent work on the economy of prehistoric Europe, Professor Grahame Clark accepts the concept of a circumpolar Stone Age. He adds however: 'What no one has yet pointed out, though, is that the distinction between the provinces is ecological as well as economic and cultural and that the boundary between them coincides with that which demarcates the deciduous from the coniferous forest'.<sup>2</sup>

This may be true as far as explicit statements are concerned, but it is implied for instance in Spalding's contribution to *Man in Northeastern North America*,<sup>3</sup> where he emphasises the links with the northern coniferous forests. In sub-boreal times the forest belt reached right up to both sides of the Behring Straits. As far as the solution of circumpolar problems is concerned, the boundary between the tundra and the coniferous forest

<sup>1</sup> Danish eskimologists, such as Thalbitzer and Hammerich, have however suggested a very remote relationship between Eskimo and Indo-European languages, with the Finno-Ugrian languages as an intermediate link.

<sup>2</sup> Clark, J. G. D.: *Prehistoric Europe: the Economic Basis*, London: Methuen, 1952, pp. 18-19.

<sup>3</sup> Ed. by Frederick Johnson (Phillips Academy) Andover, Mass, 1947.



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has clearly been of prime importance, and, since the ecological difference is here more striking, is of greater importance than the boundary between the coniferous and deciduous forests. While I do not maintain that the similarities and dissimilarities can be explained in terms of the natural environment alone, by ecological deterministic hypotheses, I suggest that the ecological similarities facilitate the diffusion of functional, cultural and social elements.

An analysis of the archaeological material demonstrates that certain parts of the whole arctic archaeological complex belong to the forest zone, as for instance the ceramics, gouges, etc., whilst others, such as the extensive use of slate for tools, the *umiak*, etc., belong to the tundra zone of the Arctic Ocean coast. Quite obviously we are dealing with two entirely different hunting and gathering economies, the one being a maritime hunting and fishing pattern of culture based on whaling, seal-hunting and fishing, as well as reindeer-hunting, the other being dependent on hunting in the forests and fishing in lakes and rivers. Only in Finnmark, where the forest zone in sub-boreal times reached to the coast, at the estuaries of large Siberian rivers, and at the Behring Straits do these two types meet one another on a large scale.

It is interesting that the Eskimos have not adopted either the comb-ceramics, the gouges, the folk-tale motifs, or the 'heart and life-line' rock carving motif, which are the most characteristic elements of the forest cultures. One must consequently assume that these elements were brought into the New World before the Eskimo barred the Behring Strait. Excavations made in recent years in the Aleutian Islands, seem to indicate that the Eskimo migration there took place some three thousand years ago. The 'Eastern Woodland pattern' used to be dated at about A.D. 500, on the assumption that cultural innovations arise under warm climatic conditions and diffuse gradually to marginal areas. My suggestion for an earlier dating<sup>4</sup> has been confirmed, and indeed exceeded, by radio-carbon methods of dating, very much shortening the period of diffusion over the continent. If the dating may be accepted as correct, there has certainly been a continuously flowing stream of influences from Asia to America, from around 3000 B.C. (and probably much earlier as recent finds in Alaska suggest), a second stream from Asia penetrating westwards to the Norwegian Atlantic Coast, and partly even to the British Isles.

This is a problem which British archaeologists do not seem to have taken up yet. I may mention however such traits as the use of schist as a material for knives, etc., subterranean dwellings, 'crucks' in some British barns, which have been connected by Professor Sigurd Erixon with the curved posts in the Lapp hut, and the Peterborough ceramics which have been connected by some British scholars with the north Eurasiatic comb-ceramics, the sea-going Irish skin-craft, which in almost every detail resemble certain Arctic *umiaks*, similar hunting methods for seal and sea-birds on the Scottish Islands, and so forth. I should emphasise that this diffusion apparently has nothing to do with migrations; nor do I subscribe to the absurd theory of the German philologist Pokorny that the Eskimo originated in Ireland!

It would seem that owing to ecological differences the influences followed two different routes, one along the shores of the Arctic Ocean, and the other penetrating the deep coniferous *taiga* further south. The maritime hunters and the forest-people were not entirely separated; evidence from the estuaries of Siberia shows that they moved along the large rivers from one zone to the other. Nor were the inland hunters isolated from

<sup>4</sup> Gutorm Gjessing: 'Some Problems in Northeastern Archaeology' in *American Antiquity*, XIII, 1948, pp. 298-302.



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peoples farther south : the comb-ceramics clearly originated in the Chinese Chia-Chia culture, while the textile-pottery, which is somewhat more recent, was due to influences from the South Russian steppes.

It is interesting to note that when the Eskimo first crossed the Behring Straits they were clearly not a slate-using people, although in North and Northeast Asia and on the east coast of North America slate was already an important material. In the old Eskimo Ipiutak culture from Point Hope in Alaska, which has been dated by Helge Larsen at A.D. c. 400-500, but which according to radio-carbon dating may be still later, slate was not used, nor was it in other instances we have of the earliest Eskimo culture. The doubt about the occurrence of slate in the Dorset culture is insignificant, since the presence of slate implements, should it be proved, would be explained by influences from Maine, the relations between the Dorset and Red Paint cultures being firmly established by other criteria.<sup>5</sup> An analysis of the evidence reveals that both the use of slate, and also the *ulo*, or crescent-shaped knife, have been introduced twice to the North American continent. Thus the *ulo*, which occurs in the Red Paint culture, recurs in the Ipiutak culture.

In East Asia the use of slate, and certain other features characteristic of the circumpolar Stone Age, appear to be very old, although their chronology is still uncertain. The greater proportion of these features have a wide Asiatic distribution. The use of slate decreases to the south, although slate spearheads have been found as far south as Indo-China. In Scandinavia and the Baltic region the distribution of these features is wider than the orthodox view would permit, in that this cultural complex includes not only what used to be called the 'Arctic Stone Age' but also the hunter-fisher culture of the entire Scandinavian peninsula, and great areas of pre-war Poland and East Prussia. This also indicates that Professor Clark's statement should not be taken too literally, since the boundary between the coniferous and deciduous forests runs through Central Sweden, southernmost Finland, and south of Lake Onega. The most important means of unifying the circumpolar Stone Age are the skin-boat along the coasts, and dog-drawn sleds and skis in the forest zone. Both skis and sledge-runners have been found in considerable number, but confined exclusively to the forest zone.

Excavations in North Norway by Nummedal and myself have shown that the coastal population moved back and forth between different summer- and winter-sites. The largest of these villages consisted of more than 70 semi-subterranean houses, although the more usual village comprised some 10 to 20 houses. One village consisted of 14 subterranean houses of a different type, having long, roofed entrances of the same type as the traditional Eskimo winter-house, although the artifacts found in conjunction with these were of an identical type to the others. These two types of village are also known from the pre-war Finnish Arctic Coast (Petschenga), the Kola Peninsula, and from Yamal in West Siberia, where Cernetsov has investigated a pre-Samoyed maritime hunters' culture of a pattern very similar to that of the Eskimo, including remnants of the kayak.<sup>6</sup>

This half-nomadic way of life has deep roots, since in Træna in Nordland, during the summer time, people moved merely a few hundred yards from relatively large winter houses built of stone and turf to cool caves, the island being too small to permit of larger migrations. A similar annual cycle prevailed among the Sea Lapps : in some places it

<sup>5</sup> Frederica de Laguna, 'The Importance of the Eskimo in Northeastern Archaeology' ; *Man in Northeastern North-America*.

<sup>6</sup> V. N. Cernetsov, 'Dvernjaja primorskaja kuljtura na Kuljtur Ja-mal', *Sovietskaja etnografija*, 1935, 4-5.



could even be traced at the beginning of the recent war. Among the Arctic peoples of North America it is still the normal pattern, some people only changing the entrance to the house; outfarming, involving moving from one house to another, may still be seen in Norway, as well as in other parts of Europe such as the Hebrides and Ireland.

In the Norwegian folk-culture of today certain traits survive which cannot be explained except in terms of pre-European traditions, for example, the position of the bear in folk-tales and in popular medicine. Up to the 19th century the bear's paw was used as an aid to childbirth. In Indo-European beliefs the bear was replaced as the great fertility symbol by the horse, the former belonging to the common magico-religious inventory of all the Arctic and sub-arctic peoples. Even when the bear occurs in Greek magic ritual it can be proved to be due to Asiatic influences from the northeast, as Alföldi has shown.<sup>7</sup>

Again, rock paintings and carvings can not only solve economic problems, but also shed light on religious questions. Tallgren has shown that the Siberian rock pictures are connected with some shamanistic ritual of hunting and fishing.<sup>8</sup> The same must be true of the European Arctic rock pictures, whilst in Alaska, on the boundary between the Eskimo and Eyak Indian territories, de Laguna has proved that the rock paintings representing whales, canoes and so on were made during the ritual performances of the shamanistic whalers' society.<sup>9</sup> Teit and Steward have correlated the rock-paintings of the interior Salish-speaking part of British Columbia and California with girls' puberty rites, and those of the Salish-speaking coastal areas on Puget Sound and the Gulf of Georgia with the highly shamanistic Great Winter Dance.<sup>10</sup>

We may therefore conclude that the peoples of the entire circumpolar tundra zone were divided into smaller semi-nomadic groups, apparently in bands or hordes, living in subterranean houses during the wintertime, while the types of dwellings used during the other seasons varied according to the different regions. We do not yet know whether the semi-subterranean houses, tents, or caves, were merely summer dwellings, or were also used in spring and autumn.

Owing to the small size of the groups we may assume that they had a loose political organisation, without centralised political authority. The social structure of the groups included a type of shamanism concerned with the means of livelihood, and in this connection it might be observed that among the Lapps to the west and the Chukchee to the east the basic social unit was not the kin, but the economically co-operating local group. Solem has demonstrated that the Lapp unit, the *sii'dá*, was primarily based upon hunting and fishing, and not upon kinship ties<sup>11</sup>, although the kinship system seems to have played an important part in the maintenance of Lapp culture. *Sii'dá*, according to Nesheim, was a word originally meaning 'the hunting territory of the group'<sup>12</sup>. Czaplicka has shown that among the Chukchee and Eskimo the basic social unit was the crew of the *umiaq*, the headman of the village, if one may use the word in connection with

<sup>7</sup> Unpublished lectures in Oslo (*Instituttet for Sammenlignende Kulturforskning*), 1947.

<sup>8</sup> A. M. Tallgren, 'Inner Asiatic and Siberian Rock Pictures', *Eurasia Septentrionalis Antiqua* VIII, Helsingfors, 1933.

<sup>9</sup> Frederica de Laguna, 'Peintures rupestres Eskimo', *Journ. de la Société des Americanistes*, xxv, 1933.

<sup>10</sup> Julian H. Steward, *Petroglyphs and Pictographs from California and the Adjoining States*.

<sup>11</sup> Erik Solem, Lappiske rittstudier, *Instituttet for Sammenlignende Kulturforskning*, Serie B-xxiv, Oslo, 1933, pp. 81.

<sup>12</sup> Asbjørn Gresheim, 'Finnish hiisi and Lappish sii'dá', *Finnisch-ugrische Forschungen*, xxx s., 292-302.

groups so little organised politically, being also the headman of the *umiaq*, the *umialiq*<sup>13</sup>. In this connection it should be remembered that the Lapps to the west and the so-called Palaeo-Asiatic peoples and the Eskimo to the east, are the only peoples in the circumpolar area who have been living there since prehistoric times, and whose social organisation has been created there, or at least adapted to the ecological situation, the social structure of the other North Siberian peoples, such as the Samoyeds, Tungus, Yakuts and others have developed under different economic systems and in different natural environments, although they may have been subjected to change after the people migrated to the arctic zone. As yet we are unable from the available material to define some of the social distinctions between peoples of the tundra zone and those of the forests, though such must clearly have existed. If the Russian archaeologists are correct, the cemetery on Olenîi Ostrov on Lake Onega indicates a social stratification which is unthinkable among maritime hunters. One cannot accept all the sociological propositions of the Russian archaeologists, however, such as their claim to have proved a patriarchal monogamous family system<sup>14</sup>.

I have been able to give only the briefest survey of the archaeological problems in the Arctic. It may be pointed out that the orthodox archaeological scheme of dealing with material in strictly chronological sequences has not been obeyed. Whilst they are of course an indispensable means of solving archaeological problems, chronology and typology are means and not ends. Instead of proving every statement by piling up all the evidence and systematising all the material, I have attempted instead to begin the task of re-building the bridge between archaeology and social anthropology. This cleft between the two disciplines is the fault of both parties—the archaeologists realise too infrequently that 'man is a social animal' clinging too much to Bergson's definition of man as *homo faber*, the tool-making being, whilst social anthropologists today tend to overlook the fact that social structures are not isolated phenomena. It is all too clear that social anthropology, archaeology and ethnology must work together in the study of diffusion with more stress laid on the mechanisms of diffusion and upon its socio-cultural function. In this co-operation, the study of the circumpolar stone age can play its part.

<sup>13</sup> M. A. Czaplicka, *Aboriginal Siberia*, Oxford 1914, p. 36.

<sup>14</sup> V. Gordon Childe, *Social Evolution*, London, 1951.



# The Tholos Tomb in Iberia

by STUART PIGGOTT

ANTAS DO CONCELHO DE REGUENGOS DE MONSARAZ. By Georg and Vera Leisner. Instituto para a Alta Cultura, Lisbon 1951, pp. 322, with 63 plates.

LOS SEPULCROS MEGALITICOS DE HUELVA. By Carlos Cerdan Marquez, and Georg and Vera Leisner. Inf. and Mem. no. 26 (Com. Gen. de Excav. Arq., Madrid), 1952, pp. 136, with 92 plates.

AT the end of the last war it became known to archaeologists in this country that there had been published in Germany in 1943 the first part, itself in two massive volumes, of a monumental survey of the Spanish chambered tombs by Dr and Frau Leisner. *Die Megalithgräber der Iberischen Halbinsel—I Der Suden* was sponsored and produced by the Römisch-Germanische Kommission, and for the first time the results of the excavations of Siret, Bonsor and others were presented to scholars in a manner which set a new standard in the publication of such material. The work is noteworthy not only for its detailed and informed discussion of the tombs and their contents, but for its scheme of total presentation of the evidence in visual form and to uniform conventions of scale and draughtsmanship, supported by photographs where necessary.

In the course of their work on the remaining areas of Iberian chambered tombs, the Leisners have produced a number of studies of individual sites or problems, and in the works under review, monographs dealing with the tombs of specific regions: with them should be taken their smaller survey of the Evora group of tombs (*Antas dos Arredores de Evora*, Evora 1949). In all, these three surveys record something over 330 tombs and much new evidence from their excavations carried out on the better preserved sites. The method of presentation follows that of *Die Megalithgräber*, and we are given a full series of plans and sections of the tombs, distribution maps, and a complete picture of the grave-goods. Everything has been done to facilitate the use of the volumes as source-books, with constant cross-references; the Reguengos volume is particularly well printed and produced.

The Reguengos region lies on the eastern edge of Portugal on the right bank of the Guadiana river. A total of 134 tombs are described, all of types which would be classed as passage-graves by British archaeologists, but of which only two are of *tholos* construction, the remainder being variants of orthostatic structures. The tombs are discussed first in terms of their architecture and ground-plan, and then in reference to their contained grave-goods; there follow sections on the finds divided into stone, pottery, schist idols (very fully discussed and classified), bone, ornaments, metal and so on, and on funeral rites. An important chapter of conclusions, and a full annotated list of monuments, completes the text.

The Leisners' conclusions expressed here and in the Huelva volume are discussed below, but out of the abundant objective detail presented to the reader we may select one or two points for emphasis. The two *tholoi* are in each instance a secondary feature inserted into the cairn of a pre-existing orthostatic passage-grave—a most remarkable arrangement. Most of the tombs had been badly plundered, but more than half the



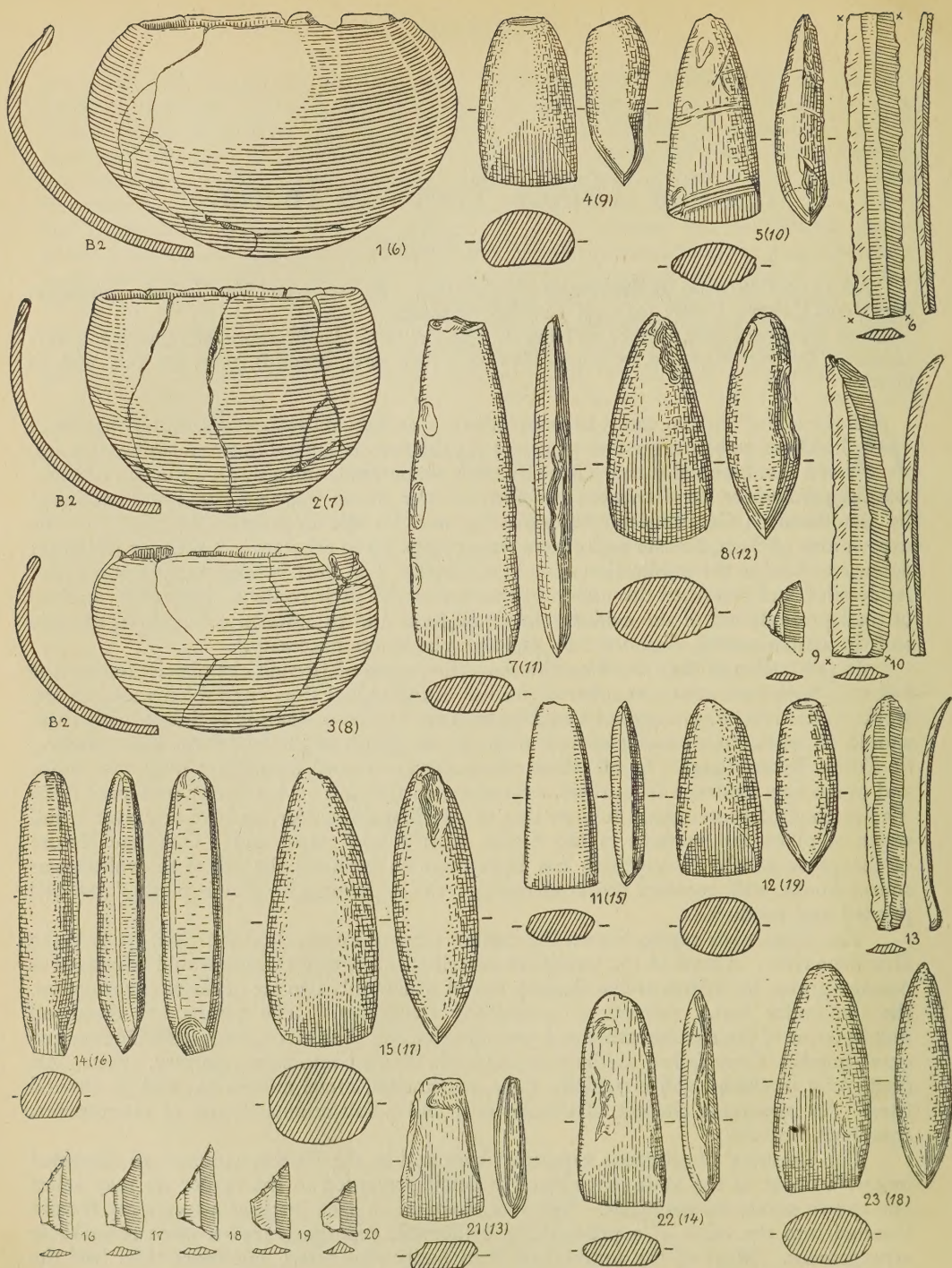


FIG. 1. GRAVE-GOODS FROM CHAMBERED TOMB OF POÇO DA GATEIRA I. (Flints  $\frac{1}{2}$ , remainder  $\frac{1}{2}$ )  
after G. and V. Leisner



## THE THOLOS TOMB IN IBERIA

untouched burial deposit was found at Poço da Gateira I, enabling the deduction to be made that the normal accompaniment of a burial seems to have been a pot, a stone axe, and a stone adze (FIG. 1). Some tombs must have contained a very large number of burials—at Olival da Pega the Leisners estimated that there may have been 200 burials, with surviving grave-goods including sherds representing at least 355 pots, and 134 schist plaques! The pottery of the Reguengos tombs included a large percentage of the *ceramica almagra*, or polished red-coated ware, which forms an important item in the authors' conclusions, but Olival da Pega produced typical Millaran pottery, including sherds of a bowl with 'oculi', as well as fragments of a form of *vase-support* (found again at Comenda I). Axes were normally round-sectioned, microliths of Neolithic type occur, the flint arrow-heads are triangular with flat or hollowed base, and from one tomb (Gorginos II), a copper or bronze arrow-point of Argaric type. Schist plaques and 'croziers' were abundant (FIG. 2).

As in the Los Millares tombs, the *symbolkeramik* from Olival da Pega included sherds with a decoration of incised triangles filled with a pointillé pattern. This form of ornament (often with white filling) is closely allied to that characteristic of the French 'neolithic' pottery (including *vase-supports*) of the Er Lannic style, and it seems likely that there may in fact be a close connection: in Charente, of course, the well-known Peu-Richard type of pottery has, as a frequent form of decoration, eye patterns closely comparable with those of the Millaran *symbolkeramik*. In Lipari, pottery with similar pointillé triangles and versions of the eye-pattern can be dated by associated Late Minoan (or Helladic) pottery to somewhere around 1550–1500 B.C.,\* and perhaps it is not then coincidence that the Wessex 'incense cups' of the Aldbourne type, independently dated by Mycenaean contacts to very much the same period, should employ precisely similar pointillé triangles as the main ornamental motif, while for eye-patterns in the British Isles we may look not only to carvings on the stones of chambered tombs but to the chalk 'drums' or idols from Folkton in Yorkshire. Such an overlap between the later building and use of passage-graves, and the development of the Wessex Bronze Age under mixed Central European and Mycenaean influences, would be in accord with other evidence.

In the Huelva volume we find a description of the tombs in a province of Spain adjacent to that of Reguengos, lying between the Guadiana and the Tinto with the main group (El Pozuelo) on the left bank of the Huelva river itself. Of the 50 tombs, 7 are *tholoi*, the remainder orthostatic; these are all described by Cerdan, Perez and the Leisners in the first part of the book, and there follows a discussion of the evidence by the Leisners, divided into that from the *tholoi* and that from the other types of tomb. While the former are of familiar types, the orthostatic tombs show some very curious variants of plan, with double or even triple elongated chambers opening from one passage, and a 'transepted' example (El Pozuelo 7) a plan of which had already been published by MacWhite, who compared it with similar tombs in West France and the Cotswolds: El Pozuelo 6 has another multi-chambered, but more rambling, plan. The Huelva pottery includes only a small proportion of the *ceramica almagra*, and plain globular bowls and shallow platters predominate. One of these, from the tomb of La Zarcita, has horizontal channelling on its vertical edge recalling that of the shallow bowls from Hebridean and Orcadian tombs, and the same richly-furnished tomb produced an oblong pottery trough on four legs and a vessel in the form of a bird. Cylindrical-section stone axes occur as at Reguengos, as well as a few schist plaques, and also finely flaked flint

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\* L. Bernabo Brea, *Arch. Prehist. Levantina*, III (1952), 69–93.



FIG. 2. GRAVE-GOODS FROM CHAMBERED TOMB OF FARISOA I. (Pottery, schist plaques and polished stone  $\frac{1}{2}$ , remainder  $\frac{1}{2}$ )  
after G. and V. Leisner



daggers or halberds, hollow-based barbed arrowheads, and a flat copper axe, all of Millaran forms and from the La Zarcita *tholos*.

On the basis of this new evidence from Spain and Portugal the Leisners have, in the Reguengos volume, undertaken a full-length discussion of the greatest importance on the whole question of the sequence and relationship of the various types of chambered tombs in Iberia: a foretaste of their views had indeed appeared in *Die Megalithgräber*, but here they are stated in the amplified form made possible by their more recent work, and set out with great clarity. They begin by stating the two opposed views generally current—that of Bosch-Gimpera, largely followed in Spain and by Åberg, that there was an indigenous evolution from the megalithic cist or 'small dolmen' to the passage-graves including those of *tholos* construction, and that originated by Forde, and supported by most British archaeologists, which would see a process of degeneration from a primary, intrusive, *tholos* tradition.

Supporters of the latter view have held that the 'neolithic' character of the grave-goods from the orthostatic tombs is in fact a reflection of the impoverishment of the rich Millaran culture; the rarity of controlled excavations in the past has also enabled them to cast doubts on the recorded assemblages from such tombs. But our authors, with a mass of objective observations now before them, point out that there are significant differences in the types of pottery, tools and other objects from the coastal *tholoi* and the inland orthostatic tombs respectively: in the latter the stone axes are invariably circular in section and not square-cut, microliths are constant, and the pottery, especially the haematite or ochre-coated *ceramica almagra*, is something distinct from anything known in the Millaran culture. These elements they regard as representing a truly neolithic culture distinct from, although persisting side-by-side with, the latter traditions.

They would see, in fact, a pre-Millaran, pre-*tholos* phase of neolithic culture in Iberia, doubtless itself introduced from outside, with its burials either (as in south Spain) in the circular tombs without stone roofs, previously assigned by them (following Siret) to an early 'Almerian' phase, or, in the areas under discussion, massive stone cists or 'small dolmens' originally contrived for individual rather than for collective burial. They would distinguish the *tholos*-tomb as an intrusive accompaniment of the Millaran culture or its equivalents, and see in the orthostatic passage-graves the interaction of two architectural traditions, in which the less sophisticated techniques of the earlier group were employed to build collective tombs approximating in plan to the Millaran *tholos*. This, as they say, is Daniel's thesis of the dual character of chambered tomb plans re-stated with a difference—what primarily is significant is not the antithesis of gallery-grave and passage-grave, but that of the *tholos*-tomb as against the orthostatic tradition of the megalithic cist.

These views clearly merit the most respectful consideration from all students of chambered tombs. The reviewer, for one, finds himself in general convinced of their validity. The primacy of the megalithic cist as the antecedent of the gallery-grave series had already been suggested by Hawkes in his *Prehistoric Foundations of Europe*, and outside Iberia the recognition, within recent years, of the true nature of the Scandinavian 'dolmens' as megalithic cists for individual burial has pointed to the likelihood that in Denmark too the orthostatic passage-graves may result from just such a fusion of architectural modes as the Leisners have postulated for western Iberia. The chambered tombs of Catalonia and the Pyrenees, with the development of the gallery-grave form, would show what would happen to the 'small dolmen' of Iberia if contact with *tholos*-builders was not made, and in the British Isles the distribution of passage-graves of *tholos* type as compared with those of orthostatic construction suggests that here, too,

the latter form evolved from contact with the builders of gallery-graves. The European material as a whole needs reviewing in this light, and in any such survey the distinction between a collective chambered tomb, and the stone-lined cist for individual burial, however massive, should be borne in mind at every turn.

So far as the Western Mediterranean is concerned, the crucial problem must still remain the origin of the collective tomb with a chamber of *tholos* construction. Apart from vague analogies of great antiquity in Arpachiyah or Egypt there appear to be no good prototypes for the typologically earlier *tholoi* as at, for instance, Los Millares, except for the little corbelled chambers in the Cyclades, themselves not very convincing. The circular tombs of the Mesarà plain in Crete can never have had corbelled roofs, and can hardly be invoked as the progenitors, and the most adventurously short chronology for the west could not make the Iberian *tholoi* descendants of those in Mycenaean Greece in the 15th century B.C. The Aegean evidence, and indeed that of the Mediterranean as a whole, suggests that the rock-cut tombs which in Iberia may appear as parallel expressions of the passage-grave idea, side-by-side with *tholoi* and tombs of orthostatic construction, may be a primary form of collective burial-place, themselves closely linked to burial in natural caves, though it is difficult to date any west or central Mediterranean examples earlier than the earliest *tholoi* there, even though their prototypes in the east have a high antiquity.

In Sicily, the earliest rock-cut tombs of the Castelluccio and allied cultures are not likely to be much if at all earlier than the appearance of bell-beakers in the island, and their Maltese counterparts on the present evidence cannot be far removed in time. The Iberian rock-cut tombs in the Malaga region and round the mouth of the Tagus appear contemporary with the later *tholos* tombs and their orthostatic versions there; the same goes for the Arles and Sardinian examples (with bell-beakers), while the Balearic rock-cut tombs have produced Argaric material. Unless something new appears out of Africa we seem still to be left with the earlier Los Millares *tholoi* as the first examples of their type, themselves evolved before or concurrently with the appearance of the rock-cut tomb in the west Mediterranean.

Typologically, rock-cut tombs of the Alapraia—Anghelu Ruju—Arles plan, with a comparatively long *dromos* approach which differentiates them from the Castelluccio-Palmella type opening direct from a forecourt, would seem likely to be a parallel development, in the western Mediterranean area, to the lengthened passage of such *tholos*-tombs as, for instance, Romeral. The eastern Mediterranean evidence makes it clear that the chambered tomb with *dromos*, whether rock-cut or of *tholos* construction, is a type appearing therefor the first time in Late Helladic times without convincing local antecedents. These facts (and others) would encourage me to support the thesis of a derivation of the Mycenaean chamber-tomb tradition from the west, even in the face of such an opponent as Sir John Myres. Mycenaean or Minoan traders had reached the western Mediterranean by the second half of the 16th century B.C., as the Lipari evidence shows, and in L.H. III times this contact was intensified. Sardinia, where the Anghelu Ruju tombs have notably long *dromoi* in the Late Helladic manner, and where Mycenaean copper ingots have been found, would represent a stage in the journey from west to east. Until it can be shown that there is a convincing common origin for the *tholoi* of Iberia and for the chambered tombs of Late Helladic Greece, the archaeological evidence of an earlier date for the former must remain significant and suggestive. It is the more significant in that the development of the rock-cut or *tholos* tomb into forms having long passages or *dromoi* appears to have taken place in the west Mediterranean during just those centuries, around 1700–1500, which would bring them into an immediately



## THE THOLOS TOMB IN IBERIA

antecedent relationship to the almost identically planned and constructed tombs of Late Helladic Greece. If these are to have a more or less local, Aegean, origin, we have to assume that, in some unexplored region there, the little Early Cycladic corbelled vaults and rock-cut tombs had developed into types startlingly like those of Iberia, even to the growth of the passage or *dromos*, during Middle Helladic and the first phase of Late Helladic times. While such parallel development is of course not impossible, until it is demonstrated by actual tombs of the requisite types dated to this intervening period in the eastern Mediterranean the case for a western origin cannot lightly be brushed aside.

The work of the Leisners points a final moral. What we want, for every area where chambered tombs were built, is a series of surveys on the comprehensive lines they have so splendidly initiated, and are so pertinaciously continuing, in Iberia. In this country only one such survey has been published, that of the Cotswold tombs carried out by the Editor of *ANTIQUITY* over 25 years ago. We need total annotated catalogues, maps, and illustrations not only of tomb-plans, but of every detail of their construction and of their grave-goods. The material to be comprised is by no means overwhelming; for England and Wales the foundations for such a survey have been laid by the Ordnance Survey, Mr Grimes and Dr Daniel. In Scotland, Miss Henshall, as Carnegie Research Fellow of the School of Scottish Studies of the University of Edinburgh, is undertaking a corpus of material (which is already well advanced) on lines closely modelled on those of the Leisners. Ireland is an obvious, if perhaps intimidating, field of study from which a magnificent survey might eventually come: Mr Ruadhri de Valera has made a beginning. When we have this basic evidence before us we may be able to see our problems a little more clearly, if not the solution of some of them.

# Magic and Medicine

by HUMPHREY HUMPHREYS

THE Oxford Dictionary defines magic as 'the pretended art of influencing the course of events by compelling the agency of spiritual beings (black magic) or by bringing into operation some occult controlling principle of nature (white magic)'. The great gaps in our knowledge of disease, coupled with the patient's demand that all disease shall receive treatment in spite of our ignorance, insure the survival of many practices falling within this definition of white magic. But in the dawn of medicine it was black magic that predominated. To primitive man illness is a mysterious occurrence without any obvious cause; his earliest explanation was the belief that an evil spirit had entered into the sufferer and his first attempts at treatment were directed to driving the demon out. Our oldest medical treatise is the Ebers papyrus, found in Egypt a century ago but dating from the reign of Amen-hetep I of the 18th dynasty (about 1550 B.C.). The Smith papyrus is even older but is mainly concerned with surgical conditions. The Ebers papyrus prescribes invocations to be uttered when taking a dose of medicine: 'Come remedy, come drive it out of this my heart, out of these my limbs'; 'Oh demon who dwellest in the body of . . . son of . . . come forth.' These invocations have their modern counterpart in the Latin imperatives and the symbols, deliberately unintelligible to the layman, which the doctors of today are trained to append to their prescriptions. And the numerous medicines mentioned in this pharmacopoeia are of a highly obnoxious character, emetics and purges, calculated to make the body of the patient so unpleasant an abode for the resident demon that he would be glad to quit if not forcibly ejected with the physical evacuations. Lizards, stinking fat, the excreta of human beings, donkeys, dogs and cats, putrid meat, are all prescribed. Castor oil and mandragora are listed amongst the herbal remedies. The belief that a medicine must be nasty to be beneficial though now obsolescent in England lasted to our own day: Gregory's powder and other nauseous remedies remain vivid memories of the older generation and historically they owe their origin to their unpleasantness.

But medicines were not the only means of driving out the demons who were conceived as the agents of illness. Amongst savages ancient or modern the witch doctor or medicine man, credited with supernatural powers and practising rites beyond the understanding of the common man, was equally efficacious. His power over evil spirits runs parallel with the functions exercised in civilised communities by the priests and prophets of organised religions. In the temples of the Egyptian pantheon, in those of Bel at Babylon, at Buddhist shrines all over the far east, at Christian churches for 1900 years, people have presented themselves in the expectation of finding relief from their bodily afflictions and not infrequently have gone away satisfied. Any day in India the fakir or the Brahmin may be seen displaying therapeutic powers, nor can a logical distinction be drawn between these and the influence assumed by the practitioners of the West, Mrs Eddy, Professor Coué, and the psychotherapist, though the imagery employed varies greatly with time and place. All these, from the priests of Osiris to the doctor



with a modern diploma, have used curative measures different from drugs and display gradations in their art which are common to all classes of them.

Direct contact, the laying on of hands by the priest, prophet or therapist, may be regarded as the first grade in this sort of healing and has been exercised from the earliest times to the present day in exorcising unpleasant spirits or symptoms. The divinity that doth hedge a king invested him with the same power when men thought of him as God's regent, and touching for the King's Evil, or scrofula, lasted in England till the reign of Queen Anne. Dr Johnson was one of the last to undergo the treatment. Macaulay records that Charles II touched over 8,000 people in 1882, his record year, and nearly 100,000 during his reign—one in sixty of the total population of England at that time. The osteopath and the physiotherapist carry on the tradition.

Such exertions were beyond the powers of most monarchs or of priestly practitioners and the process imposed the maximum inconvenience on the patient. So from the earliest times this power of healing was made capable of conveyance to a distance through the medium of some concrete object with which the patient could make contact. Amulets and charms, locketts and liturgical texts, sacred emblems from the scarab to the Cross, all carried on the person, were credited with prophylactic as well as therapeutic powers. They could avert the evil eye and were therefore highly profitable to those who dispensed them. It is only a few years (1924-26) since the properties of Abram's Box were gravely discussed in the *British Medical Journal* and the Royal Society of Medicine appointed a Committee to investigate it. There are highly educated English men and women who habitually carry a nutmeg, some iodine crystals or a potato because they have been told they might prevent rheumatism or some other complaint. Bathing in a sacred stream, or drinking waters from a consecrated fountain, is another form of contact therapy, famed in legend, which can be witnessed in many parts of the world. The writer has seen men and women students queuing naked to stand under a sacred waterfall at a Buddhist temple in Japan, the halt and the maimed stumbling down to the Ganges at Benares, elderly Englishmen sipping the waters at Leamington and Bath, people of both sexes and all ages dipping themselves in the Droitwich brine. It was in fact the 18th century belief in this type of magic, skilfully exploited by Ralph Allen, that has given us Bath, one of the few beautiful cities in Britain.

There is another way in which therapy has been conveyed without the inconvenience of personal contact between the healer and the healed. The exhibition of sacred relics or consecrated objects of any kind will afford mass healing to large crowds simultaneously and thus economise effort. Buddhists will crowd a temple to suffocation point to see a casket containing the tooth of Gautama and feel the impact of its life-giving power. Medieval and modern history has many a tale to tell of miraculous cures wrought by pilgrimage to places where nails from the Cross, fragments of its wood, parings of St. Peter's nails or other relics were enshrined. The bones of a saint, even his effigy have brought fortune to many a church. Chaucer is quite frank about the motive which impelled his pilgrims to assemble at Southwark :

‘ And specially from every shires end  
 ‘ Of England to Cauntesbury they wend  
 ‘ The holy blissful martyr for to seek  
 ‘ That them hath helpen when that they were sick ’

If this seems to invoke gratitude as the motive for the journey it is the gratitude defined by Sir Robert Walpole as a lively sense of further favours to come. Future prophylaxis and past relief were probably in the pilgrims' mind, for few people distinguish clearly

between prevention and cure. Where even attendance at a shrine was inconvenient, cures have been promised by regular recitation of some formula or prayer, the proper performance of prescribed exercises and attitudes.

All these methods of therapy whether exercised by the medicine man or modern practitioners have been successful, but their success lies not in the practices prescribed but in the faith of the patient and it appears to matter little what that faith may be, provided it is firm. Without this all is vanity, with it benefit and even cure may result if the bodily disorder is functional in nature and nervous in origin. Even when it is organic and physical it is rash to assume that no benefit may result. So intimate and indefinable is the influence of mind over body that it may affect its physical resistance to disease. Most doctors have seen patients pass away from mere apprehension of approaching death, and others whose physical state was more serious, recover by the sheer strength of their will to live, and their certainty of a cure. And since in most diseases time, rest and the *vis medicatrix nature* are far more effective than physic, since recovery is more common than death, the credit for a cure is commonly given to the therapy employed, even though statistical analysis or controlled experiment might prove it to have been without significant influence on the result. And of course faith in the doctor is even more important than faith in the physic he prescribes.

Sympathetic magic is the name given to a practice very common amongst primitive people which in its simplest form consists of imitating the result you wish to produce. The rain-maker imitates rain in some way such as spraying it from his lips, or, like Elijah on Mount Carmel, by filling a trench with water. Man will make an image of the enemy he wishes to injure or the game he wishes to kill, and will implant on the image the wound he wants to inflict in the faith that a real injury to his victim will result. Sympathetic magic is the stock-in-trade of fertility cults, and in medicine there is one form with a long history behind it. It is difficult—indeed impossible in the absence of any education in science—for man to draw a sharp distinction between inorganic and organic matter. He is therefore apt to regard any substance which appears to be immune to the ordinary processes of corruption and decay, particularly if it be rare or produced by living things, as endowed in some way with the secret of life with which it can be made to part when subjected to suitable magic or applied appropriately to the human body. Horn, ivory, pearls, coral, bezoar stones, portions of mummies and above all gold have a long history of employment as agents to prolong or preserve life. Sometimes they are powdered and swallowed, but more often, being precious, they are applied in some way to the human body: they may be worn as amulets or rings, they may be shaped into a vessel from which any fluid will impart to the drinker something of the immunity from decay inherent in the cup he quaffed. An Egyptian Pharaoh had gold leaf applied to his mummy or its case to insure its incorruptibility. A cup of unicorn's horn would neutralise any poison drunk therefrom and this property is recorded from the 5th century B.C. in Persia to the 18th century in England, and to the present day in Asia. Women in India who habitually wear horn amulets, Englishwomen with their pearls and gold rings may be mere followers of fashion, but they bear unconscious witness to an ancient faith in the pharmaceutical efficacy of these substances. Gold injections are still employed.

One of the most curious forms of sympathetic magic, much discussed in the 17th century, was the application of drugs to the weapon which had caused a wound in the expectation of influencing the wound itself. Sometimes a malign influence was aimed at, and men caused the wounds of their foes to fester by suitable treatment of the arms that had inflicted them. Sometimes men treated accidental wounds by anointing their agent with soothing unguents.



A very important part has been played in medicine by a form of sympathetic magic known as the doctrine of signatures. This doctrine is based on the belief that like cures like (*similia similibus curantur*) and is exemplified in the homely proverb that you can be cured by a hair of the dog that bit you. It is not too much to claim that a substantial proportion of the drugs which have appeared in the British Pharmacopoeia since it was first published owe their inclusion to the influence of this belief which was preached by Paracelsus in the 16th century and was the central doctrine which gave its name to 19th century homoeopathy. Thus red coloured drugs were good for haemorrhage, henbane which has a seed-pod not unlike in shape to a human mandible was given for tooth-ache, saxifrage—a family of plants that grow well in rock crevices—was given for stone in the belief (enshrined in the name and mentioned by Pliny) that the plants themselves fractured the rocks and could thus dissolve or split internal stones in the human body. Names often preserve ancient beliefs of this kind. To wear an amethyst—a wine coloured stone—was to be proof against drunkenness—Greek α (not) μεθύστος (drunk). The orchid gets its Linnaean name from the resemblance of its twin tuberous roots to testicles (Greek ὄρχις, = a testicle) and was therefore administered for diseases of those organs. This resemblance was noted long before Linnaeus and Shakespeare refers to it when he includes in Ophelia's garland :

Long purples  
That liberal shepherds give a grosser name  
But our cold maids do dead men's fingers call.

Homoeopathy perhaps owed its considerable vogue less to its doctrine of signatures than to the fact that its founder Hahnemann, in protest against the dangerously large doses of many drugs then current, advocated very minute doses—far too small in fact to have the slightest effect. The cynics of the day said that the patients of the homoeopaths died of their disease, the patients of the allopaths (the ordinary practitioners) died of the cure. Oliver Wendell Holmes wrote in 1860 : ' Throw out opium, throw out a few specifics which our art did not discover, throw out wine which is a food and the vapours which produce the miracle of anaesthesia—and I firmly believe that if the whole *materia medica* as now used could be sunk to the bottom of the sea it would be all the better for mankind and all the worse for the fishes '.

Among the few specifics he had in mind more than one owed its discovery to the doctrine of signatures in its popular form—the belief that like cures like, which was and is very widely held. It is difficult to resist the belief that the milk-maids who told Jenner an attack of cow-pox prevented small-pox had been influenced by this almost universal superstition of like curing like. Ipecacuanha is a specific for amoebic dysentery : the plant is native to Brazil where the disease is very prevalent and was introduced to Europe in the 17th century, being administered on the sympathetic principle that a purge and emetic is the correct drug for diarrhoea. It achieved fame by a spectacular cure of the Dauphin, son of Louis XIV. We cannot be sure whether the credit for discovery of the antimalarial properties of quinine should go to Peruvians or Spaniards, but two things are certain : malaria has always been associated with water, and in monsoon countries like India its seasonal incidence coincides with the rains : the cinchona tree grows in damp places and its oldest legends relate that malarious patients drinking water into which chincona bushes had fallen noted its bitter taste, found their fever vanish and so revealed this invaluable remedy. Cinchona was introduced to Europe by the Jesuits in 1639 and was known as Jesuit bark though quinine, the active principle, was first isolated by Pelletier in 1820.

## ANTIQUITY

Generations of children have been told by their nurses when their nettle stings were relieved by dock leaves that 'Providence' always arranges to deploy docks and nettles side by side, and that the cure for a disease can always be found where the cause is present. A similar belief led to the discovery of the best-attested of all remedies applied on the principle of similarity, that of salicylic acid which has a specific effect on acute rheumatism. There appeared in the *Lancet* on March 4th, 1876, an article by Dr T. Maclagan, M.D., reporting his discovery in words similar to those used by nursemaids save that 'nature' has replaced 'providence'. After a reference to quinine and ipecacuanha he goes on: 'Impressed by the fact of Nature seeming to produce the remedy under climatic conditions similar to those which give rise to the disease, and believing in the miasmatic origin of rheumatic fever it seemed to me that a remedy for that disease would hopefully be looked for among those plants and trees whose favourite habitat presented conditions analogous to those under which the rheumatic miasm seemed most to prevail. A low-lying, damp locality, with a cold, rather than warm, climate, gives the conditions under which rheumatic fever is most readily produced. On reflection it seemed to me that the plants whose haunts best corresponded to such a description were those belonging to the natural order Salicaceæ, the various forms of willow. Among the Salicaceæ, therefore, I determined to search for a remedy for acute rheumatism. The bark of many species of willow contains a bitter principle called salicin. This principle was exactly what I wanted: to it therefore I determined to have recourse. It will thus be seen that the employment of salicin in the treatment of acute rheumatism was no haphazard experiment, but had a fair foundation in reason and analogy'. He then goes on to report a series of cases of acute rheumatism successfully treated with this drug which was not at that time in the British Pharmacopoeia but has remained ever since the standard remedy for the disease, whose real nature is still unknown. And since salicylates have the general property of reducing fever and relieving pain they are useful in many minor disorders. Everyone who has ever cured a headache with a dose of aspirin owes his relief to Dr Maclagan's faith in the magical principle of like curing like. He later became a leading London consultant and continued in practice into the 20th century. An acquaintance even with contemporary medicine will soon reveal the fact that in the wide range of diseases where an accurate understanding of their nature has not yet been achieved, empirical practices 'bringing into operation some occult controlling principle of nature' are still prevalent.



# Fire and the Sword: the Technique of Destruction

by COLONEL D. H. GORDON

IN the course of excavation, diggers at many sites come upon a layer in the accumulated debris having such a considerable ash content as to convince them that the settlement occupying the site at that particular period had been destroyed by fire; and this supposition is of course strengthened if the ceramic forms or other cultural objects contained in the mound change at this point. While in very many instances these deductions are probably correct, it is the purpose of this paper to examine what destruction by fire entails in the way of preparation, how it is affected by the style of structures involved and whether the total destruction of villages by fire or their inhabitants by the sword is as simple a procedure as would sometimes appear to be imagined. Having taken part in the destruction by fire of a number of villages of the type that obtains, and must have obtained for centuries past, in the Indo-Afghan borderlands, I have learned by experience that the casual application of a torch will not necessarily set fire to anything.

The destruction of a village in Waziristan was almost always accompanied by strenuous opposition on the part of its disgruntled inhabitants, and it is difficult to believe that in the 2nd millenium B.C. reaction was very different. A house with mud and rubble walls and a flat mud covered roof has to be prepared for burning or it will not burn at all: the two essentials being extra fuel and a good draught. These houses will not burn by the simple application of a torch to such woodwork as forms part of their fabric; elaborate preparation must be made if they are to be even rendered uninhabitable.

The architecture is of rubble walls with a single doorway and a few, if any, small windows. The roof is of three inch poles carried on two large beams in prolongation from one end wall to the other, their butts supported centrally by a bracket on two wooden pillars; on these poles is a thick layer of brushwood and on this about two or three inches of mud. Such houses can be dealt with as follows. Firstly, dry brushwood must be stacked round the walls inside and then draught provided either by digging a good deal of the mud off the roof and hacking out draught holes in the brushwood layer, a most laborious method and one likely to be attended by fatalities if the enraged householders are being fussy over the damage being done to their property, or by cutting the main supporting pillars with explosive, which drops the roof in the centre producing draught vents round the top of the walls where the roof poles protrude. The stacked brushwood on each side of the door was sprinkled with kerosene and this was fired with a torch made of kerosene-soaked sandbag wired to a stick, lit with a match (FIG. 1). When the inhabitants discovered that we used their cut brushwood goat-pound fences to burn their houses, they fired these themselves and effectively made house burning impossible. Where this had been done, only the destruction of valuable main beams by explosives was possible. Even where houses were thoroughly burned they could be, and in fact were, made habitable after a few months work<sup>1</sup>.

In the course of such operations could one, if one had wished, have wiped out the inhabitants by the sword? The evidence is that even employing skilful means of deception and rapid night marches no inhabitants were ever encountered—all had managed to make a safe get-away. At the same time however there was a stringent and effective blockade, families being driven up into the snow-line without shelter and with the

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<sup>1</sup> Experience gained in Operations in Waziristan against the Mahsuds and Wazirs, winter 1919–

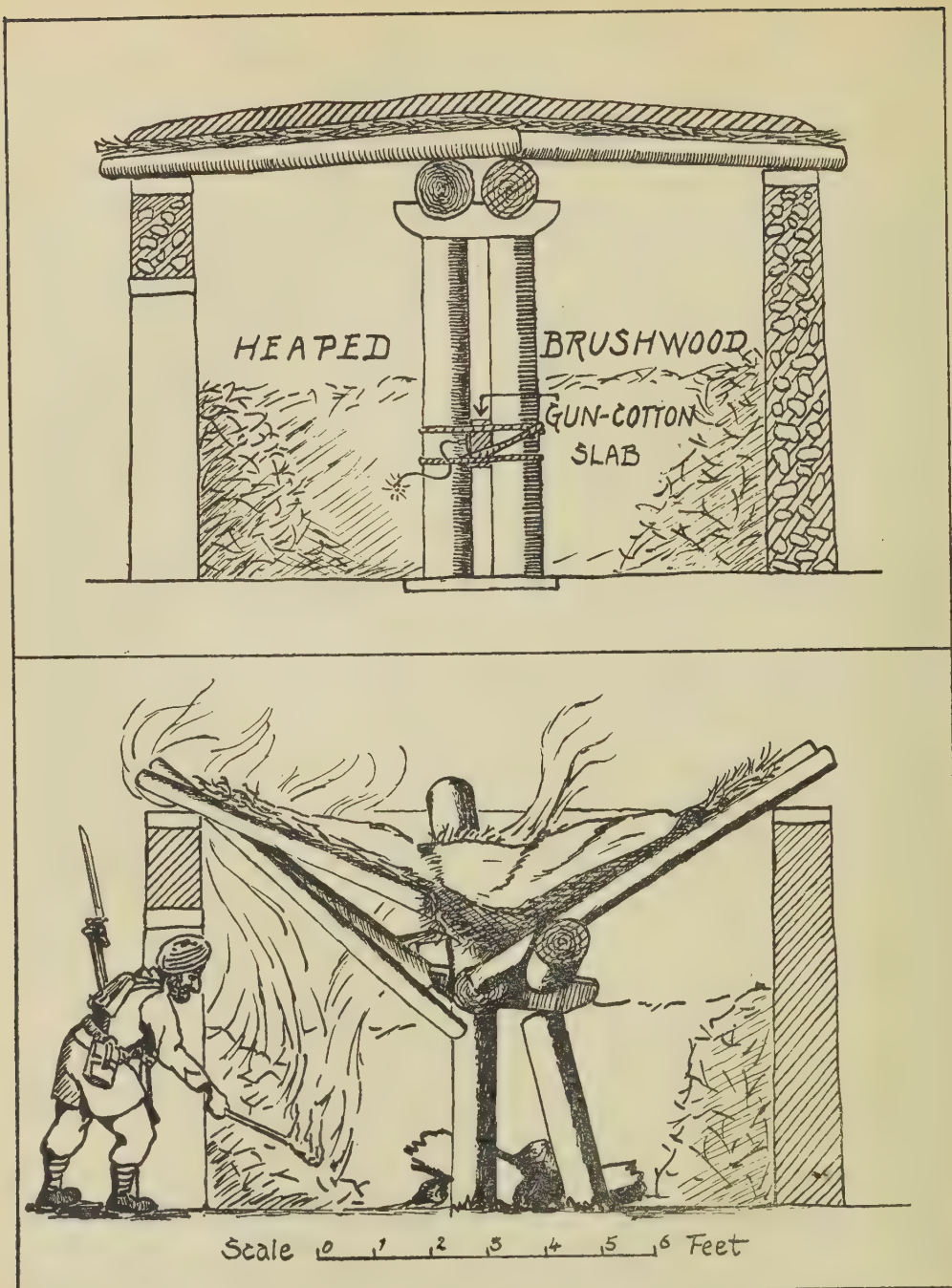


FIG. 1. TWO STAGES IN THE DESTRUCTION OF A HOUSE WITH FLAT MUD ROOF IN WAZIRISTAN



## FIRE AND THE SWORD: THE TECHNIQUE OF DESTRUCTION

temperature falling at night to 7° Fah., and though they suffered considerable hardship, few died. In the light of these facts let us judge what probably happened in the past.

Wooden, reed or daub and wattle houses and houses having thatched roofs could be fired without difficulty by raiders in a matter of moments, but houses with flat mud roofs, as are deemed to have existed throughout much of the Middle East, could not have been fired in the scramble of a raid, and if no extra fuel were available they could not have been fired at all. There are two possibilities, either the tentative reconstructions of houses with flat mud roofs that are often made are in many cases incorrect or equally in many cases the so-called destruction level is nothing of the kind.

The remains of the burnt house in the highest level of the Sohr Damb of Nal in South Baluchistan, though difficult to sort out, seem to indicate a thatched roof with a ridge pole carried on a king-post<sup>2</sup>. If this were the normal roofing of houses in the Indo-Iranian borderlands of the 2nd millennium B.C., their destruction by burning would have presented no difficulty. It seems probable however that many houses whose remains show an ash layer were mud roofed and were in fact never destroyed by fire. The interior of a Wazir house where fires have burned for many years on an open hearth with no chimney and very little ventilation, presents a floor thickly coated with a fine grey dust hopping with fleas and a brushwood ceiling kippered black with smoke. More houses in monsoon areas, and the monsoon probably spread at least to the Iranian border in the 3rd and 2nd millennia, collapse from rain than are ever destroyed by fire. The falling down of one's house is to an Indian what the demise of a grandmother is to an office-boy, the stock excuse for a holiday, and when a house collapses in this way and the site is levelled for a new one, the debris, where the standards of hygiene are at a Wazir level, contains a thick layer of ashy earth floor and blackened brushwood which would in due course present an archaeologist with conclusive evidence of an invasion and destruction by fire and the sword.

Let us now attempt to apply some of this practical experience to the events of the 2nd millennium B.C. Early in that period those involved in warlike ventures would, as a habit normal also in peace, carry in a pouch or some such container a flint blade, a lump of iron pyrites and some tinder, and with these could produce a fire probably more efficiently and rapidly than we can with matches, if the experience of picnicking is any criterion. They could have provided themselves with torches impregnated with vegetable oil, resin or pitch, and carried out the necessary preparation with ropes and axes. If the houses had thatched roofs, a torch applied to windward would set all ablaze at once; with flat mud roofs however they would have faced all the difficulties we met in Waziristan, and deprived of dry brushwood could have carried out no burning whatsoever.

Modern frontier expeditions, like the Romans, made a defended camp their first task after an advance, and one difficulty encountered was to carry out an effective destruction before having to disengage and withdraw to one's camp. Did this trouble our invaders of the 2nd millennium? One would imagine that they might remain *in situ* and, if it were cold, warm their hands at the cheerful blaze. But it is doubtful whether the local inhabitants, if at all warlike, would leave the attackers undisturbed. Danger from shot weapons—bows and arrows and javelins, would not be so great as from modern rifles, but even so in enclosed scrub country a number of casualties could quite easily be inflicted without running much risk.

Modern operations avoided both night for the actual destruction and being involved in the dense smoke of the burning. Darkness and smoke both give excellent opportunities for counter-attack. A charge of swordsmen, especially delivered from the intensified

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<sup>2</sup> 'Excavations in Baluchistan', 1925, by H. Hargreaves, *Mem. Archaeol. Sur. of India*, No. 35.

dark against an enemy shown up by the glare of burning, could deal out many casualties and the same would be possible over familiar ground under cover of smoke. Today automatic weapons ensure immunity from such counter attacks, but in ancient times they would have been most effective. It seems likely therefore that the considerations which made us avoid darkness except for the approach, and smoke except as a screen to cover our withdrawal, would have been even more compelling for our early raiders.

Did the invaders clear out by night or did they still occupy the scattered villages from which they had driven the inhabitants? No modern force would lightly take the risk of nighting in scattered groups on unfamiliar ground. A savage enraged enemy would have every opportunity by concentrating on one group of wiping it out by a night attack, and nothing would have been more simple against ill-disciplined raiders.

It would appear therefore that only large invading forces could have carried out the relatively protracted destruction of mud-roofed houses with any degree of security and that widespread destruction must indicate an invasion on a large scale; and even so unless extra fuel were available the houses could not be burnt, they could only be pulled to bits and their woodwork used for fuel as was done in Waziristan to villages near to the camp. Having regard to these facts it is probable that the houses that were burnt on the N.W. Frontier of India in the widespread destructions of c. 1800 B.C. had thatched roofs.

All levels containing an ash layer cannot be due to destruction by burning; very many must represent dirty ash-impregnated floors. At the mound of Sar Dheri, twelve miles west of Mardan in the N.W. Frontier Province of Pakistan, the excavators stated that three final occupation levels, all showing signs of destruction by fire, were observed in the uppermost 8 feet of deposit, this being apparent from three successive layers of ashes<sup>3</sup>. As however the same families of potters occupied each level leaving the evidence of their kilns, either there were no forcible conflagrations or these folk showed great tenacity in returning to the old homestead; a fact which leads us to consider whether the sword wiped out all or even the majority of an invaded people.

As has been shown from modern experience, dwellers in anything but the most open and easy terrain take to the hills, scrub or forests and evade their attackers quite easily. Did then people in ancient times never get wiped out by the sword? Of course they did, the answer as far as the Near and Middle East are concerned being paradoxically enough 'cities of refuge'. These were excellent to shelter villagers when an alarm had gone out that raiders were out in strength, but if the local kinglet of such a stronghold, buoyed up by the short-term prudence of flattering courtiers and soothsayers, decided to outface a Shalmaneser I or some similar tough character, then there was no escape for those trapped by the conqueror who killed or enslaved them.

In cities in the Orient today, and possibly throughout most of the world until relatively recent times, upper storeys of buildings were of wood or of daub and wattle with wood frames. Such structures, as distinct from single storey mud-roofed houses, would lend themselves to wholesale destruction by fire and many cities were totally destroyed. We can take it, however, that there was seldom a replacement of one set of inhabitants by another. Usually in fact the original people remained to serve the conquering minority, except where there was a mass migration of people displaced by more powerful invaders. It was the collapse of civilization under the impact of barbarism, the extinction of good administration causing canals to silt up, communications and trade to disappear and cities to fall into ruin, that produced famine, chaos and devastation to a far greater degree than Fire and the Sword.

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<sup>3</sup> The report of the extensive excavations at this site, including a 52 feet deep test pit, has not yet been fully published.



# Hoddom

by C. A. RALEGH RADFORD

**H**ODDOM lies in Dumfriesshire on the east bank of the Annan, about 10 miles from the Solway. The valley, which now carries the main road and the railway from Carlisle to the north, has always been an important line of communication and Hoddom lies at a point where the river is easily passable. The name first appears in records of the 12th century, when the church of Hoddom was claimed as a possession of the See of Glasgow. But the importance of the site is far older as is shown by the magnificent series of crosses, illustrated in this article. The tradition of Glasgow would carry the story of Hoddom even further back, connecting the church with St. Kentigern, the founder of the See.

The crosses have been found at various times in and around the site of the demolished parish church. The finest pieces, after a chequered history, unhappily disappeared during the second world war. It has therefore seemed desirable to publish a rather fuller record of the more important monuments, illustrating them with the excellent series of photographs taken by Dr O. G. S. Crawford in 1936, when they were preserved at Hoddom Castle<sup>1</sup>. I am much indebted to Dr Crawford, who suggested the preparation of this account and placed at my disposal his series of photographs. At Hoddom I had the assistance of Mr R. C. Reid, who made arrangements with the Dumfriesshire County Council and the Church of Scotland for the removal to the Burgh Museum of Dumfries of the later stones, which still lay in the kirkyard. In the course of unearthing stones half buried in the soil, opportunity was taken to re-examine the masonry of the mediæval church. I would express my best thanks to Mr Reid and to all others concerned, to Mr A. E. Truckell, Curator of the Burgh Museum, and Miss B. Blanche for assistance in the preparation for publication of the later stones; the drawings of the later stones are by Miss Blanche. Fig. 1 is reproduced, by kind permission of the Ashmolean Museum, from the late W. G. Collingwood's original drawing (Northumbrian Crosses of the Pre-Norman Age, fig. 51).

## THE BRITISH CHURCH

The Life of St. Kentigern is recorded in two texts written in the 12th century. The earlier anonymous fragment, dedicated to Bishop Herbert of Glasgow (1147-64), breaks off with the birth of the saint. The later life, written by Jocelyn of Furness, is complete; it is dedicated to Bishop Jocelyn (1175-99). This life, which is very full and detailed, embodies the tradition of Glasgow; there are indications that it draws upon older written sources<sup>2</sup>.

Strathclyde, which then extended southwards into Dumfriesshire, and possibly beyond the Solway into Cumberland, was the main scene of St. Kentigern's missionary

<sup>1</sup> The fullest accounts are in *Royal Commission on Ancient Monuments: Dumfriesshire*, no. 273, fig. 75-8 and *Trans. Dumfriesshire and Galloway Natural History and Archaeological Society*, Series III (cited *D. & G.N.H.A.S. III*), v. 69.

<sup>2</sup> Both lives are published in *Historians of Scotland*, vol. v.

activity. Elected by an unnamed king and the clergy, the Saint was consecrated by an Irish Bishop and established his cathedral and monastery at Glasgow, on the banks of the Clyde<sup>3</sup>, some miles upstream from the royal seat of Alclyde (Dumbarton). The land had already been converted to Christianity by the labours of St. Ninian and his disciples and the life mentions incidentally that there was already at Glasgow a cemetery, 'which had been previously consecrated by St. Ninian'<sup>4</sup>. The earlier conversion of the area is borne out by the Breton life of St. Gildas, who was born in Strathclyde about 500 and whose birth is shown against a Christian background<sup>5</sup>. St. Kentigern, according to his biographer, was summoned to combat a widespread apostasy.

The mission was successful, but after a period 'a certain tyrant, by name Morken, ascended the throne' of Strathclyde. St. Kentigern found no favour with the new ruler and, after the failure of a plot against his life, went south to Wales, where he is honoured as the founder of St. Asaph<sup>6</sup>. Morgan, to use the modern form, does not figure in the genealogy of the Kings of Strathclyde, who belonged to the clan of Dyfnwal hen. But a chieftain of this name, Morgant bulc, a great-great-grandson of Coil hen, appears at the right time in the genealogies of that clan<sup>7</sup>, which ruled the lands further east; it is possible that the episode of the tyrant Morgan represents a temporary overthrow of the rulers of Strathclyde by a neighbouring dynasty.

The rule of the tyrant ended with the accession of King Rhydderch, who summoned back St. Kentigern. As he returned north king and people went out to meet their bishop<sup>8</sup>. The assembly took place at Hoddum, where the saint preached to the multitude. His sermon was directed particularly against Woden, 'whom they, and especially the Angles, believed to be the chief deity'<sup>9</sup>. This passage, as has long been recognized, provides evidence of the early penetration of Northumbria into what is now Southern Scotland. Such a meeting is likely to have been held near the border between the two races and the story may embody the tradition of some treaty between Northumbria and Strathclyde, accompanied by a mission to the heathen Angles. King Rhydderch ap Tudwal is known from other sources; he was a contemporary of St. Columba (ob. 597)<sup>10</sup>. The life continues with an account of St. Kentigern's missionary activities. He is said to have established his See for a season at Hoddum, building churches and ordaining priests, before returning to 'his own city, Glasgow'<sup>11</sup>.

The history of Christianity in Strathclyde, as told in the Life of St. Kentigern, finds its confirmation in the archaeological remains. The early inscriptions of the British Church in Southern Scotland start in the middle of the 5th century and continue through the 6th into the early 7th century. There is a group in the west of Galloway, centred on Whithorn. There are others stretching south from Lothian across the Border into Northumberland. But neither Strathclyde nor Dumfriesshire has yet produced a single example of these memorials. The only early Christian monument

<sup>3</sup> *Vita Kentigerni*, cap. xi.

<sup>4</sup> *ibid*, cap. ix.

<sup>5</sup> *Vita S. Gildae*, cap. i (Lot, *Melanges d'Histoire bretonne*, 433); cf. Lloyd, *History of Wales*, I, 135.

<sup>6</sup> *Vita Kentigerni*, capp. xix and xxi-xxiii.

<sup>7</sup> *Y Cymmrodor*, ix, 172-3: pedigrees v and vi.

<sup>8</sup> *Vita Kentigerni*, capp. xxix-xxx.

<sup>9</sup> *Ibid*, cap. xxxii.

<sup>10</sup> Adamnani, *Vita S. Columbae*, I, 15.

<sup>11</sup> *Vita Kentigerni*, cap. xxxiii.



## HODDOM

in the area is the small incised cross lately recorded at Ruthwell<sup>12</sup>; this belongs to a type that can hardly be earlier than the age of St. Kentigern himself.

### THE NORTHUMBRIAN CHURCH

St. Kentigern's death is traditionally dated to 603; this may be regarded as approximately correct. In the course of the 7th century the northern shore of the Solway passed into Northumbrian hands<sup>13</sup> and with it the churches founded by the saint at Hoddom and in Annandale. The British ecclesiastical organization, here as in Wales, would have been monastic<sup>14</sup> and the prominence of Hoddom in the later tradition suggests that it was the site of the principal monastery. This foundation, like Whithorn, was probably taken over by the Northumbrians. No record of this change survives, nor indeed is Hoddom mentioned during this period, unless, as some scholars have suggested, it is to be identified with Tigbrethingham. This place, otherwise unknown, occurs in a 10th century list of the ancient possessions of Lindisfarne, in a context which suggests that it was an important church in the western part of the diocese<sup>15</sup>.

But the lack of historical record is compensated by the discovery of crosses and other sculptured fragments in and around the medieval parish church. This church lay on the east bank of the Annan, about  $\frac{1}{4}$  mile below Hoddom Bridge. The ancient kirkyard still remains, marking the area which has yielded the sculptured fragments. The finest pieces, now missing, were built into a summerhouse at Knockhill. For this purpose the broken pieces of the great cross were split longitudinally so that both faces might be shown. The stones from Knockhill were brought to Hoddom Castle between the wars and have been missing since 1939.

The great cross, which is both the finest and the earliest of the recorded monuments, was a magnificent example of the Northumbrian high cross, best known by the examples at Ruthwell and Bewcastle. The head measured about 3 feet across and the scale suggests that it originally stood to much the same height as the 17 feet of the Ruthwell Cross. The arrangement is dignified, the stiff hieratic figure style accompanied by a naturalistic vine scroll on the edges of the shaft. A detailed analysis of the style and ornament suggests that it is rather later than the crosses at Ruthwell and Bewcastle, which were erected about 700. I should suggest a date near the middle of the 8th century.

Fragments from a second rather smaller cross, decorated on one face only, are of poorer quality: they are later, probably c. 800. These two crosses were commemorative; each was set up to mark some important event in the history of the abbey. There was also part of the shaft of a plain memorial cross of the type common at Whitby in the 8th and 9th centuries<sup>16</sup>.

Part of the shaft of a third great cross was found built into the masonry of the medieval church when this was demolished in 1815; it is now in the Museum of National Antiquities at Edinburgh<sup>17</sup>. The surviving section came from the top of the shaft with the base of the lower arm still visible. It measures 1 ft. 10 in. high, tapering from 10 in. wide at the broken base to 8 $\frac{1}{2}$  in. at the top of the shaft. On the front is a draped

<sup>12</sup> *D. & G.N.H.A.S. III*, xxviii, 158.

<sup>13</sup> Stenton, *Anglo-Saxon England*, 85.

<sup>14</sup> Lloyd, *History of Wales*, I, 205 sqq.

<sup>15</sup> Symeon of Durham, 'Historia Regum', s.a. 854 (Rolls Series, *Opera*, II, 101); cf. W. G. Collingwood, *Early Northumbrian Crosses of the Pre-Norman Age*, 40.

<sup>16</sup> e.g., nos. 3-9, in *Archaeologia*, LXXXIX, 36.

<sup>17</sup> *Royal Commission on Ancient Monuments: Dumfriesshire*, no. 273, fig. 78.

figure of Christ, holding a book. He stands within a niche with a gabled top supported by columns with moulded capitals and bases. In the triangular fields above the gable are heads personifying the sun and moon<sup>18</sup>. Half figures, also holding books and haloed, are shown in similar niches on the two edges of the shaft. Figures in niches with same moulded capitals occur on a number of 9th century Northumbrian crosses including those at Otley and Dewsbury<sup>19</sup>. The main figure is in the same tradition as the sculpture of the great cross. I should place this shaft in the early 9th century.

The medieval parish church at Hoddom was partly uncovered when digging a grave over 40 years ago<sup>20</sup>. The incomplete plan shows a nave with a narrower chancel and two enigmatic walls, possibly part of a sacristy, on the north. Recent examination has shown that the nave is older than the chancel<sup>21</sup>. The regular coursed masonry of reused Roman stones from Birrens and the large, roughly dressed quoins resemble Northumbrian work like the church at Escomb; the building may well belong to the period of the early monastery at Hoddom.

### THE VIKING AGE

York and the surrounding lands were seized by the Danes in the 3rd quarter of the 9th century, but northern Northumbria enjoyed a respite. When the Vikings came to Dumfriesshire they were Norsemen from Ireland, largely Irish by race and, in part at least, Christian. Hoddom, like Whithorn, may well have weathered the storm and continued to serve as a religious centre and burial ground for the new rulers.

After the Golden Age of the 7th and early 8th centuries Saxon monasticism began a rapid decline. Bede (ob. 735) already points to many abuses in the Northumbrian church and 150 years later, in the time of King Alfred (871-99), the monastic life was no longer followed in Saxon England. From an early period many of the smaller houses, the monasteriola, had been private property, owned and maintained by laymen. Such communities as survived became collegiate rather than monastic in character, often with lay patronage and control<sup>22</sup>. It may safely be assumed that Hoddom followed the normal course and that the establishment at the time of the Viking conquest was a community of priests with close relations with the neighbouring secular lords. A 'monastery' of this type would in practice differ little from many of the Celtic houses to which the new rulers were accustomed, and it is unlikely that the conquest would have far-reaching effects.

A number of fragments belong to this period. A broken crosshead, now in the Museum at Dumfries, has a central pelleted boss, surrounded by a well-designed interlace, on one side and a plain boss on the other. The broken ends of the bar joining the two arms show that it had a wheel head<sup>23</sup>. The well executed design and the good

<sup>18</sup> The heavenly orbs were represented above the crucifixion at Ruthwell (Baldwin Brown, *Arts in Early England*, v, 141); they also occur on other Saxon crosses, such as Alnmouth. But the personification of the two luminaries only becomes common in Carolingian art, which is probably the source of this representation (cf. *Ant. Journ.*, xvii, 26-7). A more rudimentary personification appears on the Aycliffe shaft (Collingwood, op. cit., fig. 97).

<sup>19</sup> Collingwood, op. cit., figs. 52 and 91.

<sup>20</sup> Plan in *Royal Commission on Ancient Monuments: Dumfriesshire*, no. 271, fig. 68.

<sup>21</sup> *D. & G.N.H.A.S. III*, xxvii, 97-101.

<sup>22</sup> D. Knowles, *The Monastic Order in England*, 21-5 and 29-36; for the use of collegiate in this sense, cf. *ibid.*, 140 and 165 (for Durham).

<sup>23</sup> *Royal Commission on Ancient Monuments: Dumfriesshire*, no. 274, fig. 79 A.



proportions indicate an early 10th century date. It probably stood at the head of the grave of some chieftain. Other fragments may be ascribed to the later 10th and 11th centuries. Individual monuments of this character became more common in Viking times. Locally there is the series of small headstones at Whithorn, while at Cambridge and Peterborough similar headstones have been found *in situ* at the head of the graves<sup>24</sup>. At Hoddom, in addition to the fragmentary cross already described and a number of other broken pieces, there is a complete headstone of the late 10th or 11th century<sup>25</sup>.

#### THE ROMANESQUE CHURCH

Viking rule in Dumfriesshire continued through the 11th century, when this area formed part of one of the nine Scottish earldoms held by Throfinn the Mighty of Orkney (ob. 1064). Early in the 12th century the Scottish crown reasserted itself. One of the measures taken by David, during his brother's lifetime, was to enquire into the rights of the church of Glasgow. The inquisition numbers Hoddom among the churches belonging to the See, and it so appears in the confirmations issued to the Bishops by Pope Alexander III (1170) and his successors<sup>26</sup>. But it is clear that they did not enjoy undisputed possession. The Bruces, as lords of Annandale, and their tenants at Hoddom claimed the right of patronage. In a charter datable between 1164 and 1174 Robert de Bruce conceded his right in the churches of Hoddom and Castlemilk to Bishop Engelram<sup>27</sup>. In 1202 a document was drawn up by the Papal Legate stating that Uduard de Hoddom 'has appeared before us in the church of St. Mary Magdalene at Lochmaben and surrendered to the Bishop by means of a book the whole right of patronage which he claimed in the church of Hoddom<sup>28</sup>'.

Surrender of rights by means of a book inevitably brings to mind the illuminated Gospels of the Celtic church, which were at times used for the transcription of records<sup>29</sup>. Such books, which tradition generally connected with the founder, often passed into the charge of lay custodians and it is tempting to regard Uduard of Hoddom, as heir to some Celtic family, passing over to the church of Glasgow the symbol in virtue of which he and his predecessors in title had exercised rights over the monastery. With this surrender. Hoddom became a parish church subject to the Bishops of Glasgow in the normal medieval manner.

The records do not illustrate the nature of the church at Hoddom during the 12th century. It is a justifiable conjecture that it survived as a collegiate body like the scollofthes of Kirkcudbright, whose conduct so scandalized St. Ailred when he visited their church in 1164<sup>30</sup>. This conjecture is borne out by the fragments of Romanesque grave slabs, more than 12 of which have been found on the site. Gravestones of this kind usually mark the burial of a priest. They occur in a number of Scottish churches, but not in such numbers. At Hoddom they serve to confirm the suggestion that some sort of ecclesiastical community survived in this period. Their frequency is in striking contrast to the scarcity of later gravestones, of which only one, dating from the early 14th century, has been found.

<sup>24</sup> *Cambridge Ant. Soc. Trans.*, XXIII, 15.

<sup>25</sup> *Royal Commission on Ancient Monuments : Dumfriesshire*, no. 274, fig. 79 B.

<sup>26</sup> *Registrum Episcopatus Glasguensis*, I, 5, 23, 43, 50 and 55.

<sup>27</sup> *Ibid*, I, 64.

<sup>28</sup> *Ibid*, I, 83.

<sup>29</sup> The Book of Deer is an example.

<sup>30</sup> *Reginald of Durham*, 179 (Surtees Society).

# ANTIQUITY

## THE GREAT CROSS

Centre and one arm of the head, together with parts of the shaft of a high cross. A reconstructed drawing of the head was published by W. G. Collingwood (*Northumbrian Crosses of the Pre-Norman Age*, fig. 51, here reproduced as FIG. 1). The fragments have been split longitudinally (see pl. 4B) so that both faces could be displayed when walled into the summerhouse. The head was ornamented on both faces with plain edges. The shaft was ornamented on all four faces. The arms had a double curve with flat slightly expanded ends.

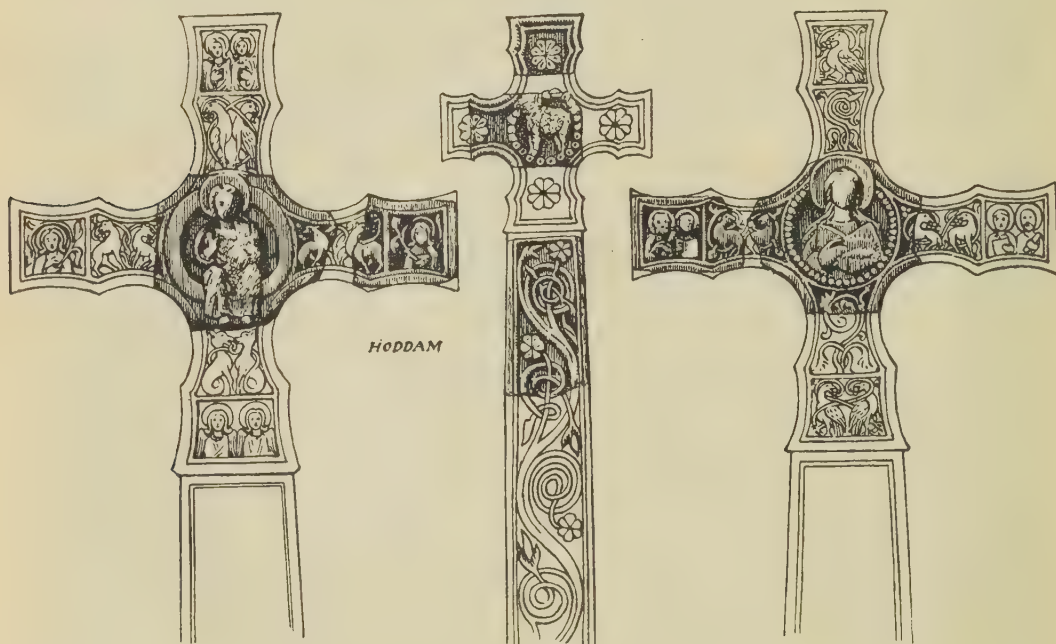


FIG. 1

On one face (PLATE 1A) the centre of the head is filled with a seated figure of Christ in majesty surrounded by a flat circular band, which is broken at the top by the haloed head and at the base by the legs and feet. The pose is frontal, the modelling flat with the folds of the drapery marked by shallow parallel lines. The face is smashed. In the left hand is a book, in the right an object not clearly identifiable, but probably an orb. The end of the sinister arm (PLATE 1B) is occupied by the bust of an angel holding a sceptre with a lily head. Between the angel and the centre is a smaller panel of two winged quadrupeds with long necks and backward turned heads.

On the other face (PLATE 2A) the centre of the head is filled with a bust of Christ within a pearled border, broken only at the top by the nimbed head. The relief is even flatter with a more schematic treatment of the drapery. The left hand holds an open book, in which the forefinger of the right hand indicates a text. In the panel at the end of the arm (PLATE 2B) are two half figures, nimbed and bearing emblems. The outer figure with the keys represents St. Peter, the other, holding a book is not identifiable. The



panel between this and the centre of the head has two animals with the heads turned back and set against a vegetal scroll.

One section of the shaft belonging to this cross is also recorded. There were panels with figure subjects on the two faces and running vine-scrolls on the edges. On one face (PLATE 3A) the base of the upper panel shows the legs of two standing figures from the knees down; that on the dexter side is draped, the legs of the other are bare. Separated from the first by a plain flat band, where one would expect an inscription, is the top of a second panel; this has the haloed heads of two standing figures. The sinister figure with a long pointed beard is probably intended for St. Paul, a type evolved at a very early date. On the other face (PLATE 4A) the upper panel again shows two standing figures, both with bare legs enmeshed in a vine scroll. The arrangement suggests the Temptation of Adam and Eve, a subject found on a number of Irish crosses. The lower panel again

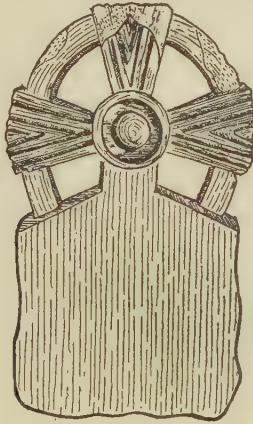


FIG. 2. HEADSTONE OF VIKING PERIOD

contains the haloed heads of two standing figures. The vine scroll on the edges (PLATE 4B) belongs to an early type; it is plastically modelled with bunches of grapes, long tapering leaves and six petalled flowers.

The flattish relief, the hieratic pose of the central figures and the stiff modelling of the drapery all suggest a comparison with the sculptures of the Ruthwell and Bewcastle crosses. The form of the head and the arrangement of the shaft with panels on the two faces and continuous scrolls on the edges occurs at Ruthwell, and also on later crosses, such as Otley and Ilkley. Angels holding lily-headed sceptres are also found on the cross at Otley (c. 800), but the style is less stiff. The animals in the inner panels have been compared with beasts on the friezes at Bredon and Fletton, which belong to the Mercian school of the 8th century. The vine scrolls, though lacking some of the finer detail of the earliest examples, have little in common with the later designs of the 9th century, such as Easby. We must therefore place the great cross at Hoddum in the 8th century, probably near the middle of that century. A rough hewn socket still lies outside the kirkyard. It is cut out of a huge boulder and may well have been prepared to take this cross.

#### THE SMALLER CROSS

Part of the head and shaft of a smaller high cross, decorated on one face only. In the centre of the head is the Agnus Dei (PLATE 1B, right) set in a pearled border. The

## ANTIQUITY

Lamb stands stiffly erect with the fleece roughly indicated by scalloped lines. The cross had short arms with a double curved outline, the whole framed with heavy mouldings. The arms are occupied by eight petalled flowers set in a plain field. The top of the shaft has a continuous vine scroll, loosely designed with six petalled flowers and drooping feathery leaves (PLATE 3B). The top of one shoot ends in an animal's head (FIG. 1).

The scroll may be compared with the Otley cross. The stiff, lumpy figure of the Lamb is also a late feature. The date should be *c.* 800 or early 9th century.



FIG. 3. ROMANESQUE GRAVE SLAB

### HEADSTONE (FIG. 2)

Small headstone with plain base and wheel cross rising from the sloping top. The centre has a prominent boss. The head and arms are wedge-shaped, their surfaces ornamented with shallow grooves forming chevrons. The slight segments forming the wheel are plain.

### ROMANESQUE GRAVE-COVER (FIG. 3)

Flat grave cover, 1 ft. 8 in. wide and originally between 5 ft. and 6 ft. long, base missing. The surface is carved with a cross in low relief set in a broad flat margin, the whole formed by sinking the background to a depth of rather over  $\frac{1}{2}$  in. The arms, but not the head, are indented into this margin. The shape of the cross follows early models, but the form of the memorial, designed to lie flat in a paved floor, is not pre-Romanesque. On other stones of this type found at Hoddum the cross has a stepped base, a feature not earlier than the 12th century.





a. LARGE CROSS



b. Left: LARGE CROSS, SINISTRAL ARM. Right: SMALLER CROSS





a. LARGE CROSS



b. LARGE CROSS, DEXTER ARM





*a.* SHAFT OF LARGE CROSS



*b.* SHAFT OF SMALLER CROSS (top to right)



a. SHAFT OF LARGE CROSS



b. LARGE CROSS: EDGE OF SHAFT



## Books Received

*The inclusion of a book in this list does not preclude its subsequent review*

- THE ARCHAEOLOGY OF WORLD RELIGIONS, by JACK FARGEAN: the background of Zoroastrianism, Hinduism, Jainism, Buddhism, Confucianism, Taoism, Shinto, Islam and Sikhism. Princeton University Press (English price, 63s, Oxford University Press, Ann Court, Warwick Square, London, E.C. 4. pp. XL + 600 with 260 photographs and 9 maps. [This is a companion volume to the author's *Light from the Ancient Past*, dealing with Judaism and Christianity. In a school or college library and to accompany any of the general courses of lectures on comparative religions which are now popular this work should have a wide appeal. The material aspect of each religion is well maintained and the numerous photographs are well selected. The author is on the staff of the Pacific School of Religions at Berkeley, California. J.L.M.].
- LIVERPOOL LIBRARIES, MUSEUMS, AND ART COMMITTEE BULLETIN. Vol. 1-2, July-Oct, 1952. [Contains a note on William Roscoe, poet and philanthropist: and a report on recent excavations of the site of Paphos in Cyprus, by the Liverpool Public Museum and the University of Saint Andrews; and a biography of Rev. H. H. Higgins to whose learning and public spirit the growth of the Liverpool Public Museums was mainly due. J.L.M.].
- A HOARD OF SILVER COINS FROM CARYSTUS, 1952, by DAVID M. ROBINSON (*Numismatic Notes and Memoirs*, 124. Am. Numismatic Society, New York, pp. 1-62, with six plates). [This find of coins was buried in the middle of the 4th century B.C., and near Carystus, then a prosperous trading city of Euboea. Most of the coins are of Carystus itself, the remainder of Athens and neighbouring cities, without much difference of style, and illustrated in the plates. The hoard is in the Collection of Dr Robinson in Baltimore. J.L.M.].
- THE TWELVE OLYMPIANS, 1952, by CHARLES SELTMAN. (Pan Books, Limited, London, pp. 196, plates I-XIII). [This useful guide presents the principal Greek deities and their Roman equivalents, with a few paragraphs about the Olympian beliefs in general and an epilogue about Olympus with an impressive photograph of the mountain from which it is supposed to take its name. There might be more about the growth of the classical theology and the relation of the Olympians with the adjacent cults and principal foreign worships which become involved. The plates might be more uniform in source and technique: we hardly see the divine concourse as a whole. J.L.M.].
- A BOOK OF GREEK COINS, by CHARLES SELTMAN (King Penguin Books, 63, 1952, pp. 32 with 135 photographic illustrations, and a map of distributions). [The author, a Fellow of Queen's College, Cambridge, has written at large on all aspects of the study of Greek coins, and collected them widely. The introduction gives just what is needed to enable a beginner or an amateur to make use of these and similar collections of coin-types and the numerous larger handbooks and histories. To display the lovely engraving of the best coins, superb examples are photographed on double scale. J.L.M.].

## ANTIQUITY

- A STUDY OF WRITING, by I. J. GELL (the Foundations of Grammatology, Chicago, 1952, pp. xvi, 296 with 95 illustrations and end-paper chart). [A well-constructed summary by an expert in the scripts of the Near East with special knowledge of Hittite. The end-paper shows clearly the principal lines of diffusion of the art of writing and there are numerous tabular alphabets and other scripts. Cretan (Minoan) is grouped with Proto-Elamite and Proto-Indic, because undeciphered. Ch. x is an interesting speculation on the future of writing. J.L.M.].
- EXCAVATIONS AT DURA-EUROPOS, 134 pages, 24 plates, 11 text figures. Yale University Press (London, Geoffrey Cumberlege), 1952. Price 32s 6d. [This is the preliminary report on the ninth season's work, 1935-36, and deals with the buildings, objects and inscriptions in the Palace of the *Dux Ripae* and the Dolicheneum].
- HISTORY OF SALONITAN CHRISTIANITY, by EJNAR DYGGVE, 164 pages, 200 illustrations. Instituttet for Sammenlignende Kulturforskning, Oslo. (London, Kegan Paul, Trench, Trubner & Co.) 1951. Price 16s. [An account, in English, of the important Christian site and monuments at Salona, the ancient capital of Illyria, near the modern Split in Jugo-Slavia. It should be welcomed by all students of the history of the Early Church, and the price is modest. F.A.].
- LA VILLA ROMANA DE LA DEHESA DE LA COCOSA, by JOSE DE C. SERRA RAFOLS, 173 pages, 37 plates. Badajoz, 1952. [A record, in Spanish, of the excavation of a Roman site near Badajoz. The buildings included houses, baths, fed by an aqueduct, and a probable Christian church].
- OUD-BELGIE, by M. E. MARIEN, 528 pages, 398 illustrations. De Sikkel, Antwerp, 1952. Price 320 Belgian francs (280 in paper covers). [A comprehensive account of the history and archaeology of the Low Countries from the earliest cultivators to the coming of the Romans. It is written in Dutch. We hope to review it later.].
- THE ANTHROPOLOGY OF IRAQ, by HENRY FIELD, 174 pages, 76 collotype plates. Peabody Museum of American Archaeology, 1952. Part II, No. 2, Kurdistan; Part II, No. 3, Conclusions.
- CAVE ARTISTS OF SOUTH AFRICA, by A. J. H. GOODWIN and ERIC ROSENTHAL. Balkema, Cape Town, 1953. Price 12s 6d. [Contains 48 hitherto unpublished reproductions of Bushman rock paintings with 30 pages of introduction and description. F.A.].
- THE SWORD FROM THE ROCK, by G. R. LEVY, 236 pages. Faber & Faber, 1953. Price 30s. [The sub-title of this book is 'An Investigation into the Origins of Epic Literature and the Development of the Hero', and the author finds these origins in the early myths and rituals of Mesopotamia and Egypt. F.A.].
- ANGLO-SAXON JEWELLERY, by RONALD JESSUP, 148 pages, 4 coloured and 40 half-tone plates, 11 text figures. Faber & Faber, 1950. Price 42s. [A useful conspectus of the subject for the general reader with excellent plates and full descriptions of the most important pieces. F.A.].
- A SHORT DICTIONARY OF FURNITURE, by JOHN GLOAG, 566 pages, 630 illustrations. George Allen & Unwin Ltd., 1952. Price 42s. [An illustrated descriptive record of furniture made in England from Norman times to the present day, with a glossary of technical terms. The hitherto inexpert reader can browse among its pages with pleasure and interest. F.A.].
- ENGLISH LOCAL HISTORY HANDLIST, 74 pages. The Historical Association, 59A, Kennington Park Road, London, S.E. 11. Revised and enlarged edition, 1952.



## BOOKS RECEIVED

Price 2s 6d, by post 2s 8d. [This bibliography and list of sources is intended primarily for the academically untrained worker, but it should be of value to any student engaged in historical research. F.A.].

- A **HANDBOOK OF LOCAL HISTORY : DORSET**, by ROBERT DOUCH, 139 pages. University of Bristol Department of Adult Education, 1952. Price 3s. [Designed to meet the same need as the pamphlet mentioned above, but of more detailed local application. F.A.].
- A **CATALOGUE OF THE CHINESE BRONZES IN THE ALFRED F. PILLSBURY COLLECTION**, by BERNHARD KARLGREN, 228 pages, 114 large plates. Minnesota University Press (London, Geoffrey Cumberlege), 1952. Price £10. [A *de-luxe* publication for the connoisseur. F.A.].
- CHINESE ARCHAIC JADES IN THE BRITISH MUSEUM**, by SOAME JENYNS, 38 pages, 40 plates. British Museum, 1951. Price 16s.
- ROMAN SILVER COINS Vol. 1, Part 1, The Republic : Vol. 1, Part 2, Julius Caesar to Augustus**. Seaby's Numismatic Publications, 65 Great Portland Street, London, W.1. Price, in paper covers, Part 1, 10s 6d ; Part 2, 7s. ; both parts bound together in cloth, 21s. [A fully illustrated catalogue for collectors, giving current market prices].
- A **GUIDE TO ST. ALBANS CATHEDRAL**, 28 pages, 12 plates, plan and section. H.M. Stationery Office. Price 2s 6d.
- MORE BATTLEFIELDS OF ENGLAND**, by LT. COLONEL ALFRED H. BURNE, D.S.O. London, Methuen & Co. Ltd., 1952, XVI and 214 pages, 18 maps and 8 panoramas. Price 21s net. [Continues, as the title indicates, the author's earlier work, *The Battlefields of England*, with a study of eighteen more battles. The use of the historical materials is generally adequate, but the strength of the book, as one would expect, is in the author's professional knowledge and in his eye for country—qualities normally wanting in the professed historian's accounts of these battles. H.R.].
- WORDS FROM HIGH SWINDON**, by J. B. JONES. [Swindon] privately, 1952, 98 pages. Price not stated. [Twenty-five essays, scientific, literary, antiquarian, reminiscent ; personal in treatment and interesting for their revelation of an interesting personality. H.R.].
- GUIDE TO ANCIENT MONUMENTS IN SCOTLAND**, by V. GORDON CHILDE and W. DOUGLAS SIMPSON. Edinburgh, H.M.S.O., 1952. Price 6s, post free 6s 3d. [Volume VI in the series of Regional Guides to Ancient Monuments in the care of the Ministry of Works]. The first comprehensive guide. Admirably illustrated. Besides the usual classified information, a notable survey for the prehistoric periods and the dark ages by Childe ; a much shorter section on the Middle Ages by Simpson. H.R.
- CERNE ABBAS : THE STORY OF A DORSET VILLAGE**, by MARY D. JONES. London, George Allen & Unwin, 1952, 143 pages, 8 illustrations and map. Price 10s 6d net. [Amateur work, but very pleasant reading and the illustrations are excellent. H.R.].

## Notes and News

### A PREHISTORIC WALL OF SUN-DRIED BRICK

About 15 km. down the Danube from Sigmaringen a prehistoric Hill-fort rises on the northern high bank, roughly 60 m. above the river level: the Heuneburg near the Talhof. Ramparts, not distinctly discernible on all sides, form a trapeziform enclosure of roughly 3 ha, surrounded by steep slopes on three sides, and protected on the fourth by two deep ditches, which separate the fort from the adjoining ground. A kind of outwork lies towards the Danube, encompassed by the elongations of the ditches. Less than 400 m. from the Heuneburg lie four great barrows, known by their rich gold finds as the Fürstengräber von Hundersingen. They form the princely necropolis pertaining to a prince's residence.

Since 1950 excavations have been going on in the Heuneburg. A first report has been published (K. Bittel-A. Rieth, *Die Heuneburg an der oberen Donau, ein frühkeltischer Fürstensitz*. Stuttgart 1951). So far the main interest of examinations has been centred on the fortifications. The remains of at least five walls, one on top of the other, are hidden beneath the rampart, four of them Later Hallstatt period, the latest belonging to the Earlier La Tène period. The remaining traces show that these walls were built according to the technique customary in contemporary Central Europe: rows of upright wooden posts, connected by lengthwise and crosswise timbering, forming a kind of case- or frame-work, and filled in with earth and stone. Only one of the walls, the second oldest, differs from anything known so far within the Hallstatt region.

This wall (period 4) has a breadth of 3 m. and consists of a rubble-base, varying in height (0.6–1 m.), and a construction of sun-dried bricks, which even now rises occasionally to 1.7 m. in the centre of the wall, and may have originally attained 2–3 m. in height. In two places—in the northwestern and south wall—projecting bastions have been ascertained, one enclosing a space of 5 by 7.5 m., the other of massive structure, attaining a depth of 7 m. (PLATE V) shows an outside view of this latter bastion, and of the structure of the brick wall. At this point the stone base measures 0.6 m. in height, built in three layers of great blocks of limestone, the material originating from quarries not far away, and showing traces of deliberate stone-cutting. The joints are filled in with small stones, clayey sand having been used for binding ('mortar'). Horizontal and vertical sections show the brick-work. The brick revetment, erected vertically on the stone base, has collapsed and been cleared away. The large flat tiles of varying colours and averaging 0.4 by 0.4 m., form a chess-board pattern. The vertical section shows the bricks in layers of oblong stripes, each about 0.06–0.08 m. in thickness, and arranged carefully, so as to avoid the joints meeting. The binding—forming narrow dark lines—is similar to that of the stone base. Traces of a conflagration with a layer of stone fragments on top, seen slanting to the right-hand side in the picture, belong to a later lay-out, and form the debris of destruction in period 3. The large post-hole with traces of a post in the background, is younger still (period 2).

Examinations of the soil and of fragments of bricks hardened in the fire of destruction show distinctly, how the brick material was formed by a mixture of clay, sand, and chopped straw. The surface of the bricks is smooth on one side and roughened by chopped straw on the other, which fact allows conclusions to be drawn about the manufacture of the bricks. It seems that specially prepared wooden frames were used, like those still in use in Anatolia.





THE HEUNEBURG NEAR SIGMARINGEN: HALLSTATT WALL OF SUN-DRIED BRICK





In prehistoric Central Europe walls of sun-dried bricks are quite unknown. There are late examples in Dacian forts in Roumania, while in Mediterranean lands and the Near East they have a long history. In Greek fortifications they also have a prominent part up to the latest times. Vitruvius, in *De Architectura* lib. II, 3 and 8 ff. describes the manufacture of sun-dried bricks (*later*), and the advantages of their use, he even mentions the customary measurements (II, 3). Those of the Greek (*Tetradoron*) correspond on the one side with the Greek brick walls preserved i.e. in Aypollonia (Albania) or in Gela (Sicily), on the other side with the measurements observed on the Heuneburg. It may not be so far fetched to interpret this style of building, so peculiar in Central Europe, as the outcome of Mediterranean influence, particularly as Attic black-figured sherds among the finds of the Heuneburg show palpable evidence of such a connection, most probably by way of the route *via* Massilia up the Rhône and Saône. W. DEHN.

NOTE. Bricks of this type are found in Macedonia during the Late Mycenaean period and also (it is thought) in a Hallstatt-La Tène A fort in the Middle Danube region. It is also possible that a route by Massilia may have been the source of the technique which would have travelled north with the Bronze technique, but at present one conjecture is as good as another. The discovery here recorded is of very great interest and should lead to other identifications.

An account by Prof. Dehn of the excavations at Heuneburg is printed in the current number of *Germania*, Jahrgang 30, 1952, Heft 3-4, 325-9. Ed.

## A MEDIEVAL DRAWING OF A PLOUGH

Although much has been written about the history of the plough in England (and still more about the team which drew it), comparatively little is known about the types of plough in use in this country in the Middle Ages, and in most cases the agricultural historian passes rapidly from the well-known (but misleading) representation of an 'Anglo-Saxon' plough in Cotton ms. Tiberius B. v to the more satisfactory illustrations provided by the 17th century improvers. It is true that ploughs are not infrequently depicted in the illuminated manuscripts of the 14th and 15th centuries, but usually on too small a scale, and with too little attention to detail, to provide a satisfactory basis for typological study. The student of English agriculture may therefore be grateful to the unknown person who in the latter part of the 13th century not only made the careful drawing of a plough (FIG. 1), but took the trouble to name its component parts in Latin. The drawing in question occurs on folio 53 of the cartulary of the Cistercian nunnery of Coton in Lincolnshire, now in the Bodleian Library at Oxford (ms. Top. Lincs. d.1). The first 40 folios of the cartulary were written in the early 13th century, but the remainder are occupied by documents transcribed at later dates. Those on folio 53 consist of an undated letter from the Master of Coton to the Archdeacon of Lincoln and a transcript of the *Quo Warranto* proceedings relating to the possessions and liberties of the nunnery. These took place in 1281.<sup>1</sup> On folio 52 there are documents dated 1282, 1279 and 1271 (in that order). It is clear on palaeographical grounds that the drawing of the plough is contemporary with the documents with which it is associated, and that the documents themselves were copied into the cartulary not long after the dates which they bear. It is therefore safe to assume that what the reader has before him is a drawing of a plough made in Lincolnshire in the reign of Edward I.

<sup>1</sup> *Placita de Quo Warranto* (Record Commission 1818), p. 415.

## ANTIQUITY

At first sight the sketch appears to be remarkably clear and precise, and the implement depicted is immediately recognisable as a rectangular framed, one-way plough, complete with its yoke. But a careful examination suggests that the drawing may have been the work of one who was more familiar with the names of plough-parts than with ploughs themselves. Mr F. G. Payne, of the Welsh Folk Museum, who has been so kind as to give me the benefit of his expert knowledge, points out that the plough-tail is shown as if it were mitred to the share-beam instead of being mortised; that, despite the annotation *due aures*, only one is in fact depicted; and that there are difficulties in the representation of the *basta*, or draught-pole, which is made to look almost indistinguishable from the two ox-bows on either side of it. In the case of a wheeled plough, it was not unusual for the draught-pole to be joined to the plough-beam by a withy-bond or other linkage, and to the yoke by similar means: but in the case of a wheel-less plough such as the one depicted, the normal arrangement was to attach the draught-chain directly to the yoke by means of a U-shaped link in the middle of the yoke. Thus (in Mr Payne's

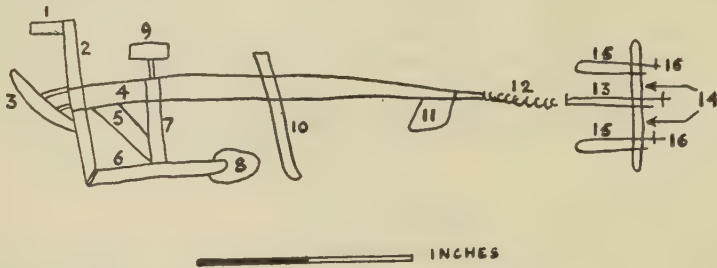


FIG. 1

words) 'if the proportions of the Coton plough are right and the details correctly drawn, you have a much shortened withy ox-team (or draught-chain) attached to a draught pole of about half the usual length, the pole being pegged through the yoke like the bows. Alternatively you have a full-length withy-team or chain, not drawn to scale, and a greatly exaggerated draught link in the middle of the yoke'. Mr Payne suggests that the drawing may have been the work of 'an accountant endeavouring to locate the positions of the various plough-parts occurring in his accounts', and so combining features derived from more than one type of plough. However this may be, the draughtsman's vocabulary was evidently greater than his technical knowledge of ploughs, and his drawing must accordingly be regarded as the work of an amateur.

The annotations also present their problems, no. 7 being illegible and no. 12 being apparently meaningless in this context. Many of them, however, occur in the well-known description of a plough in Alexander Neckam's treatise *De Utensilibus*<sup>2</sup>, and most of them can be elucidated with the aid of medieval vocabularies<sup>3</sup>, manorial account-rolls, and Fitzherbert's *Book of Husbandry* (1534)<sup>4</sup>. Basically, the vocabulary used is

<sup>2</sup> Printed by T. Wright in the work cited below (note 3).

<sup>3</sup> cf. T. Wright, *A Volume of Vocabularies illustrating the conditions and manners of our forefathers* (1857).

<sup>4</sup> I have been privileged to make use of the late Mr J. S. Drew's valuable notes on the nomenclature of the medieval plough, at present deposited in the Public Record Office.



classical in origin<sup>5</sup>, but medieval ploughs differed in several respects from their ancient prototypes, and the famous passage in the *Georgics* in which Virgil describes the Roman 'crooked' plough cannot easily be interpreted in terms of a 13th-century framed plough such as the one illustrated in the Coton cartulary. Consequently there is some inconsistency on the part of medieval writers in the use of classical words such as *stiva*, *buris* and *temo*, and the nomenclature of the Coton plough should not necessarily be regarded as of universal application, even for its own period.

Reading from left to right, the annotations are as follows (FIG. 1):—

1.	<i>stiva</i>	—	—	—	—	the land-handle.
2.	<i>buris</i>	—	—	—	—	the plough-tail.
3.	<i>ansa</i>	—	—	—	—	the furrow-handle or 'plough stytle', attached to the plough-tail by two 'rough-staves'.
4.	<i>temo</i>	—	—	—	—	the plough-beam.
5.	<i>due aures</i>	—	—	—	—	the ear <sup>6</sup> .
6.	<i>dentale</i>	—	—	—	—	the share-beam or 'plough-head'.
7.	<i>inter</i> [				(?) <sup>7</sup>	the sheath.
8.	<i>vomer</i>	—	—	—	—	the plough-share.
9.	<i>malholmus</i>	—	—	—	—	the mallet or 'plough-betel' <sup>8</sup> .
10.	<i>culter</i>	—	—	—	—	the coulter.
11.	<i>pes</i>	—	—	—	—	the plough-foot <sup>9</sup> .
12.	<i>concitandum in timpanum</i>	(?)	—	—	—	[the draught-chain].
13.	<i>basta</i> <sup>10</sup>	—	—	—	—	the draught-pole.
14.	<i>iugum</i>	—	—	—	—	the yoke.
15.	<i>vinculum</i>	—	—	—	—	the ox-bow or 'bonde' <sup>11</sup> .
16.	<i>cavillum</i>	—	—	—	—	a pin or peg.

H. M. COLVIN.

## A REMNANT OF THE PRIMEVAL FOREST

Of the primeval forest or natural unmodified woodland of early times in this country very little remains. Patches have been described as existing on Dartmoor, in Westmorland and one or two other places. There is one very interesting piece, not so

<sup>5</sup> cf. A. S. F. Gow, 'The Ancient Plough', *Journal of Hellenic Studies*, xxxiv (1914).

<sup>6</sup> *Due aures* refers to the two ears of the southern plough: but only one is depicted here, as was usual in English one-way ploughs. It was changed from one side of the implement to the other at the end of each furrow.

<sup>7</sup> No word of this kind occurs in the vocabularies: the obvious translation of 'sheath' is *vagina*, which is occasionally found in medieval manorial accounts.

<sup>8</sup> The *mallus* or 'bytylle' is mentioned in connection with the plough in one of the vocabularies printed by Wright (op. cit., p. 180), and it can clearly be seen in several medieval drawings of ploughs (e.g. the Louterell Psalter and *Cambridge Economic History*, I (1941), pl. v). It was used to tighten the various wedges by means of which the plough was set.

<sup>9</sup> 'In a wheel-less plough an adjustable piece of wood or iron attached to the front of the beam, regulating the depth of the ploughing' (*N.E.D.*). Fitzherbert says 'the plough-fote is a lyttel pece of wodde, with a croked end set before in a morteyns in the ploghe beame, set fast with wedges, to dryve upp and downe, and it is a staye to order of what depeness the ploghe shall go'.

<sup>10</sup> More correctly *basto*.

<sup>11</sup> *Vincula* is glossed as 'bonde(s)' in the metrical vocabulary published by Wright (*Vocabularies*, p. 180).

## ANTIQUITY

commonly known remaining intact on the Coity Wallia Common at Blackmill, in the entrance to the hilly section of the Ogmere Valley in Mid-Glamorgan. This was first observed and described by Mr H. J. Randall, LL.B., F.S.A., of Bridgend, who was able to take Professor A. G. Tansley, of Oxford, to see it. Professor Tansley, from the botanical angle, confirmed Mr Randall's conclusions, which were mainly based upon his general observations coupled with a knowledge of the historical background of the woodland.

Taking the history first: this woodland at Allt y Rhiw is 124 acres in extent and is included in the 2600 acres which constitute the Common of Coity Wallia—in the 'Welshry' part of the manor of Coity as distinct from the 'Englishry', with its villages in which the customs and laws of the Norman manor, based mainly upon a corn-growing economy, prevailed in the Middle Ages. The 'Welshry', or upland part, with its scattered homesteads, continued to be pastoral and to be governed, subject to the Norman overlordship, by the tribal Welsh laws customary to a cattle and sheep economy.

But this woodland at Allt y Rhiw was not just odd copses on common land where the commoners would have had the usual 'wood-bute', or the right to take wood off the Common if they could find it. It is a separate area of woodland 'subject to common rights', which is not the same kind of thing, and such an occurrence is very rare. This fact has preserved the woodland—or at least saved it from being cleared or treated by replanting in an organised manner. It has continued through the years to have the same kind of tree associations as was found in the primeval forests of this country, but the haphazard manner in which the commoners have hacked the trees and, especially on the exposed southern portion of the woodland, the influence of the prevailing west wind, have stunted the development and mis-shaped the trees, so that the woodland is gnarled and unevenly grown.

Two other factors of historical and also geological import have helped to preserve these trees from being cleared and suffering complete degradation, as was the case in so many of the Glamorganshire mining valleys. The first is that at Blackmill the richest coal measures, due to faulting, are very deep, and they are for that reason not worked from this spot, so that the ancient pastoral and arboreal pattern of the landscape here has been maintained to this day. The second factor is that no iron-working was done at or near Blackmill during the times that charcoal and not coke was used in the smelting of ore, such as happened in many of the other Glamorganshire valleys to which the 'rough-shod' ironmasters came much earlier. At Merthyr, for example, the iron founders, in the early days of the 19th century, worked part of their time in the woodlands cutting down trees (oak for the most part) for the charcoal burners, and part of their time at the smelting furnaces. This caused an almost complete denudation of the forests that at one time spread thickly through the Glamorganshire and West Monmouthshire Valleys, when it was said that a squirrel could traverse them without once touching the ground.

The botanical facts confirmed Mr Randall's conclusions. The oaks were of the older *Quercus Sessiliflora* or durmast oak, typical of our early forests in the lime-starved soils of the western and northern uplands and valleys of Britain. They range from a height of about 15 feet in the more exposed southern part of the wood to about 25 or 30 feet in the northern. The sessile oak, when in undisturbed and sheltered situations, will grow straight and fairly tall, and was much in favour either in natural woodland or in plantations for the purpose of supplying good timber, as well as for its prolific supply of acorns for the hogs feeding below. A marked and peculiar feature of the sessile oak is that the acorns grow in bunches close to the twigs and they have no stem—hence the name. The *Quercus Pedunculata* of the eastern parts of Britain have the acorns growing 'pedunculate' on long stalks. The pedunculate oak will grow in more limey soils and to a larger and more massive shape.



Professor Tansley agreed that the separate, common woodland at Allt y Rhiw had all the appearances one would expect of a primitive piece of forest unaltered by subsequent clearing, plantation or conservation. It was, however, self-renewing through the growth of the many saplings which sprang from fallen acorns. Allowing for the inroads of commoners after wood for fuel, stakes and other purposes, the Allt y Rhiw remnant is one of the few examples left in this country of its ancient natural or primeval forests in which the cycle of germination, healthy growth and decay took its course without much interference by man or beast. It is, as Mr Randall has described it, 'a living historical monument'.

F. EVANS.

### THE SWEDISH ARCHAEOLOGICAL EXPEDITION TO INDIA

A Swedish archaeological expedition has this year been excavating from the beginning of January to the end of April in a mound called Rung Mahal. This place is one of about a hundred, with pinkish potsherds called 'thar' or 'theri' situated in the desert-area in the north of Bikaner (Rajasthan) where the now dried up river Sarvati once made the living easy.

The Indian Department of Archaeology has during the last three years been making a survey, led by the present Director General, Mr A. Ghosh, of those monuments, distinguishing three different periods, one corresponding to Harappa time, one called the grey-ware period, belonging to the later part of the first millennium B.C. and the third flourishing in the 1st centuries A.D. From potsherds found on the surface of the mound this last industry was already before our excavations called the Rung Mahal culture.

The systematic excavations of this year have shown that this name was very well chosen as representative for a large group of mounds. The finds of pottery are extremely rich, and although the material has so far not been worked through it can be said that it will give a very good survey of the ceramics from this part of the country during Kushan and Gupta time. The painted pottery—black on a bright red ground—mostly belongs to late Kushan and early Gupta time. It is of a very high quality and will add to the knowledge of forms and ornamentation of that period. The big convex vessels are mostly decorated with graceful flower-ornaments. Some few are ornamented with animal figures; a 'centipede' with dragon-wings provides an explanation of hitherto puzzling details on separate potsherds. Worth mentioning also are some clay censers, the handle of one being ornamented with a nandi, and an offering bowl with the heads of two male gods on one side of the brim which is embraced by their arms.

If pottery composes the considerably greatest part of the finds there are, however, also to be mentioned a few terracotta human and animal figures. Interesting but so far not interpreted is a fragment of a clay tablet with an inscription supposed to be in Gupta script.

A hundred bronze-coins, still not all cleaned, seem to belong mostly to Kushan time. Many of them are imitations of Kushan coins and also punch-marked coins.

Rung Mahal is about 200 by 200 metres. The highest level is 9 metres above the surrounding desert. We excavated two different trenches, one in the eastern part—20 × 10 metres—where we started at the top of the mound and followed the layers down, and one in the western part starting in a 'valley' in the middle of the mound and continuing both to higher and lower levels. In the eastern part we distinguished eight different building levels. With one exception the houses were built of sun-dried bricks. The best preserved house-floor, found on a low level is 7 by 1.75 metres in extent and

contained two rooms, the smallest only 1.75 by 1.75 metres. In this room we found a number of coins. The thickness of the excavated layers in this part of the mound was about 5 metres.

In the above mentioned trench in the western part of the mound we found a conglomerate of house-floors and walls, mostly one room added to another. The walls are often rather carelessly built of sun-dried brick and mud, though one piece of wall has its external side covered with burnt brick. Interesting are two whitewashed walls decorated with a frame in red paint.

As far as can be judged from this year's excavations the main habitation belongs to the Kushan and Gupta time. In trial-pits we established that in the two trenches no older habitation had preceded. On the surface, however, were also found tombs of Mogul times and sporadic finds, e.g. bronze coins of the same date. HANNA RYDH.

### P. D. R. WILLIAMS-HUNT; AN OBITUARY

The tragic accident which led to the death of Peter Williams-Hunt in Malaya was announced early in June (see obituary notices in *The Times* of June 16). By readers of *ANTIQUITY* his articles in recent years (listed below) will be well remembered. The news came as a great shock to his friends and was a serious loss to Archaeology and Ethnology. Even now, so very few scholars combine the study of both subjects, and fewer still are able to put their philosophy into practice by direct fieldwork. Williams-Hunt, although he was only 35, had a firm and original grasp of the theory and the practice of both, and fully understood that they were the past and present aspects of a single story that coheres. In S.E. Asia he had, of course, a wonderful field of opportunity for this approach, and he seized it with a tireless energy, cheerfulness, courage (and even bravado), which often forcibly reminded one of the spirit of the Elizabethan period. He believed in direct action (often single-handed in the jungle) to get things done—an attitude not always appreciated by bureaucrats.

At his death he was Acting Director of Museums, and also Adviser on Aborigines, for the Federation of Malaya. He had crowded many important discoveries into a few years and, apart from the absolute value of his finds, his career is distinguished for two further and significant reasons. The first is that he was self-trained in observation, without specialised training at a University, and yet the precision with which he recorded his finds and also documented his specimens sent back to the British Museum and the Pitt Rivers Museum could hardly have been bettered by the most experienced or elaborately-trained man. It was a brilliant vindication of the amateur turned professional, and re-affirms that what *matters* in science (or humanism) is the *spirit* in which it is done. The other point is that he knew nothing of the Far East until he was posted there in 1945, but his pre-war background of archaeological field-work in Britain (even though only on a local scale) provided the right kind of experience in observation that he could build on, and use to deal successfully with problems of far greater weight on the other side of the world as soon as the opportunity offered. He had married Wa Draman, a daughter of a chief in Perak, and (though receiving only a modicum of encouragement) he planned to spend his life out there in that 'high tradition of adventure which is still our greatest pride'—that spirit of discovery characterised by Sir Mortimer Wheeler in his article on 'Adventure and Sir Flinders Petrie' in the June issue of *ANTIQUITY*. One thing is certain: had Williams-Hunt lived the archaeology and ethnology of S.E. Asia would have hummed with activity as never before.



For the last 10 years we had been close friends, since the years we had spent as fellows officers in the same Army intelligence unit in N. Africa and Italy; and we had kept in close touch ever since. His regular long letters from Malaya brought me news of a host of activities and plans for research and discovery. In a letter of August 1952, he wrote: 'Last year I brought in over 100,000 pieces of Neolithic pottery including complete vessels, hundreds of stone tools of various dates, and we had the important find of 4th-5th century B.C. Greek pottery in association with a Neolithic burial'. But he added that, nevertheless, 'some 90 per cent of my time is taken up with red tape and unessential administration'! He moved so fast and worked so tirelessly that much of his material must still be unpublished and I am glad that I kept all his letters. In the last I received (3 weeks before his death) he asked for help in building up a reference collection of pottery sherds from all over the world for teaching and comparative purposes in the National Museum at Kuala Lumpur, and, what is more, he would have done so! He reported that he was hard at work on a great expansion of the Museums Department, long overdue Antiquities Ordinances, new Museums, school loan collections, popular pamphlets and many other things which had long awaited action.

His interests were extraordinarily wide. With me he was collaborating in the study of archaeology and ethnology of traded goods, especially beads and ancient Chinese export ceramics. To Dr Smeath and Dr Polunin he gave valuable help in selecting tribal groups suitable for special blood-grouping studies, to the Singapore Botanical Gardens he sent rare orchids, and zoological specimens to the Raffles Museum. He could pilot two types of light aircraft, took the best ground photographs of tribal peoples that I have ever seen, and had a good deal of skill (learnt during the war) in parachute-jumping! Behind all this, lay that greatest merit of scholarship, impartiality. That is why he was a successful pioneer both in the air photography of modern tribal layouts and cultivation systems as well as ancient city sites in S.E. Asia. His heart was in both. He kept alive his scientific spirit of enquiry through dangerous years. It was characteristic that he chose to accompany a jungle patrol on Christmas Day, when things were at their worst a few years back, to gather some new data. He was truly fond of the aborigines, who took him as a friend. His burial was according to Senoi-Semioi rites in his wife's village in the jungle. 'With bread, a parang, blowpipe, and hatchet were placed a tweed suit, a dress shirt and black tie, toilet articles and cigarettes, and a copy of the *National Geographic Magazine*'. A ritual hut was built over the grave, as in European Bronze Age cultures. I knew Williams-Hunt intimately, and feel certain that these last attentions would have greatly pleased him. The tragedy of fact surpassed even the tales of Joseph Conrad.

A few words must be added about Williams-Hunt's archaeological publications since the War (those on anthropology will be found summarised in my obituary notice in *Man*). He and I published a joint article (of which the text was, in fact, mine) in *ANTIQUITY*, December 1946, entitled 'Siticulosa Apulia', in which the discoveries of many kinds of air photograph sites, first found on our flights together in S.E. Italy, were announced. On arrival in the Far East, he immediately applied the lessons of British air-archaeology to that vast area, and gifts from him have much enriched the University of Oxford's collection of air photographs, in my charge, and are in constant use for lecturing and teaching. To the volume of the *Journal of the Siam Society* published in 1949, he contributed 'An Introduction to the Study of Archaeology from the Air', explaining its potentialities for Siamese sites. In *ANTIQUITY*, 1948, pp. 103-5, he published 'Archaeology and the Topographical Interpretation of Air Photographs', outlining very original and useful experiments in locating Stone Age sites in Australia.

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This was followed by a very important (though preliminary) paper on 'Irregular Earthworks in Ancient Siam' in *ANTIQUITY*, March 1950; illustrating a few of the several hundred ancient cities of Mon-Khmer times he had found from the air. I was in close and constant touch with him over this, and we had spent many hours together interpreting the photos. Before his death he gave me a free hand to publish other examples and to discuss his conclusions in my forthcoming book *Ancient Landscapes in Europe and Asia*. He was always extremely generous about sharing discoveries. In the *Journal of the Malayan Branch of the Royal Asiatic Society* (Feb. 1951 and Aug. 1952) he had articles on 'Recent Archaeological Discoveries in Malaya'; the second dealt with the remarkable find of 4th or 5th century B.C. Greek sherds in a cave in N. Malaya, recognised and preserved through his quickness of eye. I know that there is a mass of his unpublished notes of the greatest importance, somewhere in Malaya (probably at Kuala Lumpur), and for its safety and preservation *in toto*, there are anxieties.

JOHN BRADFORD.



## Reviews

THE SHORTER CAMBRIDGE MEDIEVAL HISTORY. By the late C. W. PREVITÉ-ORTON, in two volumes, *Cambridge University Press*, 1952, 1202 pp., 265 illustrations, 26 maps, 27 genealogical tables. 55s net the set.

The *Cambridge Medieval History* is in many ways the greatest of the Cambridge Histories. It is, and will remain, the great summary and reference book of the medieval scholarship of its time, the earlier 20th century. What was intended, but what it did not achieve—a clear continuous narrative for the general reader—is now provided. In twelve hundred pages, less than forty chapters, is the essence of nearly twelve hundred years. Those who knew C. W. Previté-Orton will expect in the *Shorter Cambridge Medieval History* an immense range of exact, carefully disciplined and self-effacing scholarship. There is also a mastery for which not even the Introductions and Epilogue by him to the *Cambridge Medieval History* proper had prepared us.

The volumes are an impressive demonstration in this age of specialisation and cooperative histories of what can be done by the single mind, and a reminder that when it can so be done it is best so done. They are more than a distillation of the larger work. After a life of study, Previté-Orton achieved in his own mind, and has here given us, a synthesis such as is nowadays rarely attempted. I ignore the pseudo-philosophical histories, which shed the restraints of chronology and manage impressive conclusions by subsuming the facts under a master-idea. A feature is the success with which Eastern and Western European history have been integrated. Not East and West in alternate chapters (as in an earlier work of his) or Byzantine history in a separate volume even (as in the *Cambridge Medieval History* proper) but a real chronological fusion and, consequently, something more like the Middle Ages' own view of the old, sophisticated civilisation, the colossus, that survived at Constantinople. Another feature is the attention paid to intellectual and religious as well as political history. The whole constitutes a most skilfully woven narrative, lucidly and tersely written.

The teacher or student, looking for guidance on matters which are still in debate, will find it or the authors' own views on them only by implication. The strictly narrative method precludes discussion, and there are no footnotes. The only danger is that the general reader, for whom the work is intended, may put it down without perhaps realising how many of our conclusions about medieval history are still tentative, how many questions there are still which can be asked but not answered: in short, how much there is still to be done in medieval history.

The same method would have prevented an attempt to include without discussion the still quite precarious generalisations of medieval economic historians, even if it had been (which it was not) part of the commission of Previté-Orton to synthesise the *Cambridge Medieval History* and the *Cambridge Economic History*. Such a synthesis would, however, have given a better reflection of the interest which the mid-20th century takes in the past. It is fair to say that the *Shorter Cambridge Medieval* adheres in the main to the themes of the *Cambridge Medieval* proper and to that extent it too belongs to the early 20th century. But interest and knowledge are not the same thing, and while the mid-20th century general reader will do well to ask questions with the economic historian and follow him on the periphery of our understanding, for a large view and a finished and readable statement of the great, central body of mid-20th century knowledge he cannot do better than follow Mr Previté-Orton.

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The work appears posthumously. It must have called for immense care to get it into print so accurately. Judgment too has been shown in the additions made to equip it as a reference book—lists of popes, kings and emperors and events as well as maps and genealogical tables. The maps are clear but not otherwise noteworthy. The illustrations are a luxury rather than an essential part of the book, but they are so numerous and uncommon that they are a treasury in themselves. Their reproduction is not always equal to the knowledge and skill that have gone to their selection. H. ROTHWELL.

THE AMATEUR HISTORIAN. Vol. I, No. I. Aug.-Sept. 1952. London. C. E. Fisher & Co., 20-21 Took's Court, E.C. 4. 1s 6d net. [9s od per annum, 10s outside U. Kingdom].

A new bi-monthly for the growing number of those who desire to be more than the 'general reader' in history and do something themselves. Their needs, whether they are groups or individuals, are for stimulus, guidance, contacts, news and reviews. An example in this first issue of guidance as to profitable lines of enquiry is 'Cavaliers, Roundheads—or Neither' by Christopher Hill; of helpful technical guidance, 'Hints on Interpreting the Public Records (1) The Feet of Fines,' by R. S. Latham. It is much to be desired that the editor should give his name as well as his address.

H. ROTHWELL.

THE NEAR EAST AND THE FOUNDATIONS FOR CIVILIZATION. By ROBERT J. BRAIDWOOD. *Condon Lectures. Oregon State System of Higher Education, Eugene, Oregon, 1952.* 1.00 dollar.

The Condon Lectureship was established by the Oregon State Board of Higher Education 'to interpret the results of significant scientific research to the nonspecialist'. The publication 'in appropriately adapted form', with 28 figures, maps, charts and a coloured plate, of Professor Braidwood's course must be regarded as fulfilling the purpose of the Lectureship in the best and fullest sense.

The author begins with an excellent philosophical discussion of the terms and concepts used by archaeologists. This amounts to a revised and somewhat condensed version of the thesis presented in 1946 in the University of Chicago Course on Anthropology: Human Origins, which has already been reviewed in ANTIQUITY. He takes as marks of civilization the following elements: Fully efficient food production; cities, urbanization; formal political state; formal laws—a new sense of moral order; formal projects and works; classes and hierarchies; writing; monumentality in art.

Food production, i.e., farming, was the necessary prelude to civilization and is separated from food-gathering by a 'revolution'. But Braidwood rejects the idea of an 'urban revolution' separating civilization, as known in the ancient world, from the earlier village economy. The first revolution after the Neolithic was the Industrial Revolution, c. A.D. 1770. Of course Braidwood has no space in these lectures to present the justification for his view, which I suppose depends upon the relative smallness of the non-agricultural urban populations of antiquity.

In any case, the present lectures are dealing primarily with the first revolution. This, he believes, is most likely to have occurred on the 'hilly flanks' of the Fertile Crescent and the argument is documented by the most recent and up-to-date account of the author's own excavations at Palegawra, Karim Shahr and Jarmo. Full use is here made of the results of Dr Helbaek's studies of the cereal remains and impressions at the last-named site, which seem to represent types intermediate between the wild and the

earliest known cultivated species. Only later did farming begin to spread on to the alluvial lands of the Fertile Crescent proper; and, apart from the Hassunan stage, the author summarizes the Mesopotamian sequence down to the beginning of the proto-literate phase in a more condensed form.

The early Mersin, Jericho and Fayum-Merimde assemblages had previously been summarized, but are all considered as later than Jarmo, while the Natufian is dismissed as still pre-food-producing. (Of the latter it would be more correct to say that the flint sickle blades were 'used for the reaping of some probably wild grain' than 'used probably for the reaping of some wild grain'.)

It is a mark of the rapidity with which archaeology is progressing that Dr Kenyon's excavations this season at Jericho seem likely to make out-of-date this account, which was at the end of 1952 the most up-to-date view of the beginnings of the earliest food-producing cultures in the Near East. But even in 1952, in the general description of early village assemblies, it was hardly correct to state that 'No traces of temples or specialized structures, or of market places, have yet been noted', for this survey was intended to include Jericho. Since, however, it will be some time before the results of Dr Kenyon's work are embodied in similarly comprehensive publications, this modestly priced pamphlet is the best extant account of the earliest stages of farming life. Though it itself has put out-of-date part of the edition of *New Light on the Most Ancient East*, published about a year ago, it is cheap enough to be used to replace the chapters rendered obsolete.

V. GORDON CHILDE.

ATTI DEL I°. CONGRESSO INTERNAZIONALE DI PREISTORIA E PROTOISTORIA MEDITERRANEA, 1950. *Florence, 1953, pp. 560.*

The subjects of the papers delivered in 1950 and now printed in full, many with illustrations, range in time from the quaternary to the Roman periods and deal not only with various aspects of cultures that have arisen in the Mediterranean basin but also with their influences north of the Alps—e.g., Harden on 'Italic and Etruscan Finds in Britain' and Werner on 'Mykenae-Siebenbürgen-Skandinavien' (both illustrated with figures and maps). The papers are too numerous to allow even a full list of titles to be given, but the following selection will give an idea of the volume's scope without pretending to recapitulate its contents.

Papers on the Old Stone Age: M. Avnimelech on 'Oscillations of the Shoreline in Palestine' and, by Lacorre and Vallois, 'L'Homme d'Ain Méterchem' (a typical Capsian industry associated with skeletal remains less primitive than the 'type of Mechtá', which latter may be associated rather with the Ibero-Maurusian industry); papers on the Ancient East: Frankfort, 'The African Foundations of Ancient Egyptian Civilization', Chéhab, 'Tombe de chefs d'époque énéolithique à Byblos' (two exceptionally rich graves of five-year-old children); von Bissing, 'Rapporti commerciale della colonia greca in Egitto, Naukratis'; on the Aegean: Stella, 'La cronologia della guerra di Troia' and A. M. Mansel, 'Das Grabmal von Mudanya (Bithynien)'.

Naturally many papers deal with Italian prehistory. We select rather arbitrarily: Bovio Marconi, 'Ceramica dipinta preistorica della Sicilia occidentale: rapporti con la ceramica balcanica'; Sestieri, 'La necropoli preistorica di Paestum'; Rittatore, 'Scoperta . . . nella Maremma Tosco-Laziale' (pit-cave tombs of the Rinaldone culture, cave habitations and burials of the Apennine culture in a region where it had not previously been known, and an urnfield of Villanovan type); Fogolari on a rare bronze figure holding a vase of Apennine type—with *ansa cilindro-retta*; and Stoltenberg, 'Der Vertragstein von Perugia'.



From Mediterranean France we have Pannoux and Arnal, 'Un groupe de gisements de la civilisation des Pasteurs des Plateaux' (descriptions of open stations with stone implements, including a celt in its antler mount and pottery with incised, channelled and relief designs—those in FIG. 4 look like Rinyo-Clacton ware, but seem wrongly labelled; of a sepulchral cleft flanked by built *antennes* (horns) forming a shallow façade, a 'dolmen' and a 'temple', followed by a discussion of the culture-sequence); Louis and Lapierre, 'Les monuments mégalithiques du Serre de "Vieio-Morto"'; Benoit, 'la statuaire d'Entremont'; from the Iberian Peninsula, San Valero Aparisi, 'Cerámica neolítica valenciana: su cronología y relaciones euroafricanas'; Cuadrado Diaz, 'El mas reciente hallazgo de epigrafía ibérica' (long inscription on a lead disc from an Iberian cremation cemetery of the 4th century B.C.); and finally, beyond the Straits, a long article on 'El determinismo geográfico en la habitación del aborigen de las Islas Canarias'. General problems of prehistoric chronology are discussed in important papers by Hawkes, Kossack and Pace.

V. G. CHILDE.

KELTSKI OPPIDUM ŽIDOVAR. By BRANKO B. GAVELA. 62 pp., *Serbian text in Roman characters*, 6 pp. *French résumé*, and 58 plates. *Univerzitet u Beogradu*, 1952.

This book describes small soundings in a hill-fort in the Serbian Banat (between Vršac and the Danube), that was girt with a dry-stone wall of 'blocs de micasciste, *peut-être* [my italics] avec les ligatures en poutres, comme l'est un murus gallicus alternis trabibus ac saxis'. No sections are shown, but two 'couches' are distinguished, one perfectly good La Tène III the other 'Thracico-Illyrian' and characterized by 'Pannonian' pottery of the Vattina type. But 'les trouvailles sporadiques de ces vases pannoniens'—which are generally attributed to the Middle Bronze Age—'permettent la conclusion que cette céramique dure jusqu'à l'époque de La Tène'! It is not at all clear, however, that the Vattina vases were actually found in association with the La Tène wares, e.g., on house floors, nor that the method of excavation was such as to allow the recognition of such association. The revolutionary conclusion might, however, be justified by the vase of good 'Pannonian' shape shown on Pl. 45 if this be really wheel-made as I infer from p. 29.

V. G. CHILDE.

#### CULTURAL STRATIGRAPHY IN THE VIRÚ VALLEY, NORTHERN PERU.

The Formative and Florescent Epochs, by WILLIAM DUNCAN STRONG and CLIFFORD EVANS, JR. pp. xx+373, 81 figs., 18 tables, xxix plates. *Columbia University Press, New York*, 1952 (London, *Geoffrey Cumberlege, O.U.P.*). (*Columbia Studies in Archaeology and Ethnology, Vol. IV*). 55s.

The Institute of Andean Research decided some years ago to make an intensive study of Peruvian man in relation to his environment from the earliest times to the present, and selected the Virú Valley in the North coast as a convenient unit for the purpose. A number of institutions co-operated in the project, and Columbia University's part, which is described in this volume, was the stratigraphical study of the early part of the archaeological succession. As a by-product, a number of graves were also excavated, among them a spectacular burial of a warrior-priest of Mochica age. The work was done in 1946 and full publication has, unavoidably, been long delayed, but the main results have been available for a number of years and now it is useful to have the data on which they are based.

One of the most important discoveries of the Columbia party was that of the pre-ceramic horticultural horizon at the Huaca Negra, of which a better representative was subsequently excavated by Junius Bird at the Huaca Prieta in the Chicama Valley. Owing

to the presence of ground water, the Virú site yielded far fewer perishables than the Chicama one, but the full publication of the latter is still to come. Continuous occupation into Coastal Chavin times was demonstrated at this site, and that period was divided into two stages by the appearance of new types of decorated pottery in the upper part.

Next in point of age were excavations which produced typological indications, but not conclusive stratigraphical proof, that the local representative of the Salinar Culture followed the Coastal Chavin, a position which had previously been inferred from grave sequences by Señor Rafael Larco Hoyle. It was proved to underlie the succeeding Gallinazo Period, and estimated to have been of short duration.

A most useful result of the party's work was the proof that the Gallinazo Culture, one of whose features is negative-painted pottery, preceded the well-known Mochica Culture, and did not follow it as had previously been believed. It is shown to have been of relatively long duration in this valley, where its maximum development seems to have been, and its features include some prominent hilltop structures in strategic positions, as well as stratified dwelling sites which the authors liken to tells. Excavations at an inhabited site called the Huaca de la Cruz, built on a sand dune, first demonstrated the succession Salinar-Gallinazo-Mochica, and then, in the last few days of the expedition, led to the discovery of important burials. The Mochica people, whose civilization developed further north in the Chicama and Santa Catalina Valleys, was proved by Prof. Bennett of Yale and the Columbia team to have conquered the Virú Valley at an advanced stage in its history, when its art already showed signs of decay. The burial of the warrior-priest, a truly sensational discovery, belongs to this stage. In a crudely dug shaft, some 11 feet deep, the excavators found the extended body of an adult man in a coffin of cane rods lashed together, accompanied by the skeletons of two llamas and a number of grave goods. This in itself was a rich find but much better followed. Underneath was found a second cane coffin with the remains of an outer casing of coarse cotton twill, on either side of which lay the huddled skeleton of a woman apparently strangled. Inside the coffin was a rich array of grave goods—16 pottery vessels, feather plumes, a copper face mask and one of copper and turquoise for the mouth, headdresses, slat boxes, gourd bowls, textiles, and, most important, three long wooden staves. One of these was a war club shod with a sharp copper point, with a pear-shaped head elaborately carved with fighting scenes; the second bore an owl on the top; the third was a ceremonial digging stick with a copper blade and on its head was carved a tusked god with an elaborate headdress like one in the grave, holding in his turn a carved digging stick and accompanied by a small boy on his right-hand side. Among this rich array, on the dexter side of the coffin, lay the skeleton of a little boy with heavy features and a deformed skull, and underlying all this was a cane partition, beneath which was the body of a very old man! The whole assemblage was arranged to correspond with the effigy of the tusked god on the staff, and doubtless the old man represented him in his lifetime. He was also a warrior, as his club shows, while his owl-staff denotes some function which we can only guess at. The god with his digging stick was certainly agricultural, and the function of the boy was to plant the seed, possibly symbolised by pieces of turquoise in his hand. The staves were ancient when buried, as is proved by some crude repairs, and Prof. Strong suggests, with reason, that this elaborate burial, showing signs of haste, marked the end of an epoch, perhaps of a dynasty, perhaps of Mochica domination in the valley. At any rate, the upper Mochica levels show signs of the influence of the highland culture formerly associated with Tiahuanaco and now with Huari, which shortly afterwards displaced it altogether.

With the end of the Mochic aculture ended also the task of the Columbia expedition, but the authors add two chapters which sum up the work and try to relate it to Peruvian

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archaeology as a whole. These contain a good deal of thoughtful speculation, which is most useful in suggesting where future work may best be carried out, and Dr Strong is already in the field, testing his conclusions in the Nazca region in the south coast. There is a long appendix giving descriptions of pottery types, followed by two shorter ones on plant remains and textiles.

The report as a whole is clearly written. Much of it is for specialists in the Peruvian field, but each chapter ends with a summary for the reader with a more general interest. There are gaps in the technical studies, but this is due to the retention of much of the material in Peru, and was outside the authors' control. The method of reproduction of the photographs gives slightly woolly results, and those which appeared in Prof. Strong's popular account of the warrior-priest's tomb in the National Geographic Magazine in 1947 were considerably clearer.

G. H. S. BUSHNELL.

**ARCHAEOLOGICAL SURVEY IN THE LOWER MISSISSIPPI ALLUVIAL VALLEY, 1940-47.** By PHILIP PHILLIPS, JAMES A. FORD and JAMES B. GRIFFIN. *Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, vol. 25. Cambridge, Mass., 1951; pp. 472, 17 tables, 73 text figures, 39 collotype figures. 8.50 dollars.*

With full awareness of dealing in superlatives, the reviewer believes this to be one of the very best archaeological studies ever produced in the United States. The eastern part of North America for a long time lagged behind the southwest, the Arctic, Middle America, and Peru in the development of a systematic archaeology; but since 1930 it has come along rapidly. The present volume, with its unexciting title, is a climax to this development of scientific prehistory in eastern North America and the Mississippi Valley. The authors are an outstanding trio, all with long experience in this particular field. For the specialist in North American archaeology the work is indispensable. Even for the non-specialist it is to be highly recommended. There is no other recent publication which would offer to the European reader a better review and case study of archaeological methodology in the North American area.

The report is well and interestingly written. The three authors were often in disagreement, and this is fully admitted and explained in the text. Rather than making for confusion and lessening of interest this technique of presentation has the effect of heightening the sense of problem throughout, of sharpening the lines between the clearly demonstrable and the speculative.

The central problem of the survey was to search for the origins or mainsprings of a cultural tradition known as the 'Mississippian'. Mississippian culture dominated most of the valley of the same name and a large portion of the southeastern quarter of the continent at the time of the De Soto *entrada* in A.D. 1540-42. It was an agricultural civilization with its socio-political foci in ceremonial centres and large towns. The construction of flat-topped, rectangular earth mounds as substructures for temples, the arrangement of these mounds around plazas, and a number of ceramic and other artifactual traits all suggest Mexican stimuli as an important force in the formation of Mississippian culture. Nevertheless, the distinctive style of Mississippian civilization was recognized as indigenous. Archaeologists are unable to trace its diffusion northward from any specific complex or period in Mexico. Its area of intensity seems not to be in the southernmost Mississippi Valley of Louisiana but in the region between the mouths of the Arkansas and Ohio Rivers.

The Phillips-Ford-Griffin team emerged with some but not all of the answers. The earliest archaeological periods in the Mississippi Alluvial Valley are characterized by



burial mounds and affiliate with the Adena and Hopewell cultures of the Ohio Valley. These were found to be followed by a period known as Baytown which provides a number of continuities out of the earlier burial mound cultures but which also offers transitional features into Mississippian. For example, the temple type mounds of Middle American genre appear for the first time in the latter part of the Baytown period where they are associated with the old local ceramic traditions. Pottery forms, more typically Mississippian, occur somewhat later. In sum, the authors have outlined a chronology for their alluvial valley region which suggests both cultural continuity and innovations. In some instances they look to Mexico or to the southwestern United States for the prototypes of these new ideas; others they cannot explain except as results of that mysterious 'x factor', cultural origination or invention *in situ*.

The monograph deals ably and critically with the uses and limitations of such methodological devices as ceramic seriation and 'metrical' stratigraphy. The correlation of archaeological dating with the amazing Mississippi River flood Plain topography is fully discussed and the always knotty problems of archaeological site identifications based upon the fragmentary chronicles of the De Soto expedition narrators are taken apart with great care. There is a fine summary section which recapitulates not only the subject matter but the spirit of the book in its clarity of factual presentation, closely reasoned analyses of disputed issues, synthesis, and the vital touch of imagination without which archaeology is best left in the ground.

GORDON R. WILLEY.

HOPEWELLIAN COMMUNITIES IN ILLINOIS. *Ed. by THORNE DEUEL. Illinois State Museum, Springfield, Ill. 1952, pp. 271, 94 plates. 3.50 dollars.*

By way of explanation to the non-specialist, Hopewell or Hopewellian is the name given to a pre-Columbian culture in the eastern United States which enjoyed a florescence somewhere between 500 B.C. and A.D. 1 (if radiocarbon dates are accepted). It appears as a climax to an older, less specialized tradition, the Woodland, and represents the socio-economic and artistic maxima of eastern North American native development to that time. Its origins are obscure and debatable. Although Middle American affinities are less pronounced than in the later Mississippian cultures, the presence of maize in Hopewellian establishes at least one important link to the south. Human figurines of pottery, resist dye painting, and obsidian blades point in the same direction. Hopewellian ceramic history, on the other hand, is intimately involved with the cord-marked, fabric-marked, and dentate-stamped wares which have their earliest American appearances north of the Ohio Valley and, probably, are of Northern Asiatic inspiration.

The present volume consists of six essays: four on site excavations, one on pottery analysis and chronology, and a final reconstructive summary of the 'Hopewellian community'. The pottery article by J. B. Griffin emphasizes the distinction between 'Hopewell' and 'Hopewellian'. The latter term has a generic and traditional connotation and refers to archaeological cultures with Woodland and Hopewell-related pottery types associated with mound-tomb burial. The more specific designation Hopewell is reserved for the classic Ohio manifestations and for the finest style of the zoned rocker-stamped pottery. Griffin demonstrates this classic Hopewell ware to be an horizon marker limited to the middle Hopewellian period in Illinois.

Classic Hopewell ware spreads far beyond Ohio and Illinois. In Louisiana and Florida it is found with mound-tomb burial but with ceramic associations that are non-Woodland. Pottery decorated with the zoned rocker-stamped technique also occurs in Middle America and Peru during the first millennium B.C. (radiocarbon dates). Thus, although a northern origin out of a Woodland pottery tradition seems the somewhat more

likely hypothesis, the history of Hopewell zoned rocker-stamped pottery is by no means firmly pinned down. In the same way, mound-tomb burial in the eastern United States has possible prototypes in both Asia and Middle America.

The short field reports in the volume are all competent presentations, and Deuel's summary is a worthy attempt at 'prehistoric sociology'. The reviewer would question the term 'community' inasmuch as the settlement composition of Hopewellian is as yet unknown. Most of the Hopewell or Hopewellian sites excavated have been mortuary or ceremonial centres. Some village sites have been explored, but there is no information on the number and size of village units which converged to build and support a ceremonial centre, if such a scattered-nucleated arrangement was, indeed, the Hopewellian community.

GORDON R. WILLEY.

ELFENBEINARBEITEN DER SPÄTANTIKE UND DES FRÜHEN MITTEL-  
ALTERS. By WOLFGANG FRITZ VOLBACH. *Römisch-Germanisches Zentral-  
museum, Mainz : Katalog 7. Second Edition. pp. 114 with 68 plates, 11½ × 8.  
Mainz, 1952. DM 42.*

The first edition of this catalogue was dated 1916. Much has been published on the subject since that date and the present volume, incorporating new discoveries that have been made in the interval, is very welcome. The catalogue 'not only includes all examples now in Germany, France, Belgium and Switzerland, but gives the list of other ivories as fully as is possible in the present circumstances'. The period covered extends from the 4th to the 7th century, with a section covering those Carolingian works, which illustrate the survival of classical art. Nearly all the 260 pieces listed are illustrated, several excellent photographs appearing on most of the plates. In the catalogue each entry has a title, giving the subject and present location of the ivory, together with the date ascribed to it by the author. The history, present condition and dimensions follow. The descriptions are clear and concise, indicating when necessary stylistic and iconographical comparisons. In cases where the place of origin and date are in dispute the author not only gives his own conclusions, but cites the more important opinions put forward by other scholars. Each entry is followed by a short bibliography.

The catalogue is preceded by a short—all too short—introduction, in which Professor Volbach outlines his interpretation of the development of the various schools of ivory carving. His judgments are cautious and convincing and we could have wished that this introduction and the short prefaces explaining the functions of the several types of ivories—diptychs, pyxides, plaques, etc.—had been worked out in greater detail.

Ivory carving is one of the most important of the arts in the early Middle Ages. The objects are small, valuable and easily transportable. Moreover, unlike the other precious substance, gold, ivory does not easily lend itself to reuse. It is known that small objects from the Eastern Empire penetrated widely into Western Europe and it is from these that we may hope to identify the trends of stylistic development in a centre like Alexandria, from which examples of the major arts are lacking. Following other scholars, Volbach attributes the pulpit reliefs at Aachen to this city. His further comment has a wide importance. 'While Alexandria in its early works is wholly under the influence of the Hellenistic art of the Empire, the Coptic works of the Egyptian hinterland are in a different style'. This is typical of the careful analysis and distinctions which characterize the whole treatment. Two other judgments may be quoted. Rejecting a Roman origin on stylistic grounds, the author attributes the Pola casket to a local Istrian school. The several artists who contributed to the Ravenna chair are shown to have been under

different influences from the east, but of the whole he suggests that it was 'possibly worked in Ravenna itself'.

All students of early Christian art and archaeology will be grateful to have this excellent catalogue with its rich series of illustrations within the compass of a modest and, for its excellence, very cheap volume. The clear text and plates are in the best traditions of German publishing.

C. A. RALEGH RADFORD.

FESTSCHRIFT DES RÖMISCH-GERMANISCHEN ZENTRALMUSEUMS IN MAINZ, 1952.  $11\frac{3}{4} \times 8\frac{1}{4}$ . 2 vols, pp. VIII+76 and IV+108 with 8 and 26 plates. Mainz: Verlag des Römisch-Germanischen Zentralmuseums, 1952. DM 15 and 24.

The centenary of the Roman-German Museum has been celebrated in difficult conditions. The buildings, the Palace of the Electors of Mainz, were largely destroyed during the war. They are now being restored and we welcome the notice that 1952 saw the beginning of the re-equipment of the galleries, offices and workshops. The present commemorative volume, like its predecessors in 1902 and 1927, contains articles contributed by the past and present officers and staff of the Museum. The subjects cover German and Central European prehistory, Roman Germany and the early Middle Ages, with one of a later period—Nahrgang on methods used for reconstituting the medieval map.

The longest and most far reaching of the prehistoric articles is that in which von Merhart discusses various types of bronze vessel belonging to the Late Bronze Age and the Hallstatt period of Central Europe. The importance of these bronzes, for prehistoric chronology has long been recognized; they were formerly held to be Italian imports. The author, expanding and making more precise earlier work in this field, shows that in addition to others discussed elsewhere the following classes were of Central European origin, a few examples being imported into Italy:—bronze basins with cruciform escutcheons, cups of the Stillfried-Hostomice type, jugs, buckets of the Kurd and Hajdu-Böszörmény types, situlae with rilled shoulders and others. He also examines the embossed ornament found on some of these vessels. The article, well illustrated with distribution maps and drawings, should be read in conjunction with those by Childe and Hawkes, in *Proc. Prehistoric Society*, vol. xiv, where the distribution map of Jenšovice (Kirkendrup) and Fuchsstadt cups forms a parallel to those under review. Sprockhoff's discussion of the typological method and its application when evolution is modified by external influences is of less direct interest to English readers. It is illustrated by reference to North German material, particularly the Iron Age Jastorf culture of the region round Hanover, but his principles have a far wider application. Behrens in his survey of the beast with the back-turned head also covers a wide field. He cites examples of this motive from the Palaeolithic, but shows that they were barren. Its real development in Europe north of the Alps belongs to the La Tène period and above all to the Migration and Merovingian ages. His illustrations provide an excellent conspectus of this art form. The remaining articles are concerned with detailed results. Kutsch publishes Acheulean hand axes from Mosdorf and Bittel La Tène pottery and coins from the hill-fort on the Donnersberg. Tiberius' sword found at Mainz, but now in the British Museum, is carefully examined by Lippold, who compares the iconography with cameos and concludes that the scene represents Tiberius receiving the gift from Augustus. Roman roads, in the Haardt form the subject of the contribution by Sprater. Behn lists and evaluates the Roman inscriptions and stone sculptures found in Starkenburg.

The early medieval period is represented by three articles. Volbach approaches the question of early Christian ivories made in Gaul. He lists the pieces known to have



been there is antiquity and, eliminating those that can be attributed to other schools on stylistic grounds, he isolates a group of rather provincial character. These ivories show a flat relief and other features which may be compared with the sculpture of Gaulish sarcophagi; these he is prepared to accept as being of native workmanship. The churches of pre-Carolingian and Carolingian date found at Hirsau are published by Schmidt. The first, dating from before 768, had a narthex, three aisles and a transept with projecting apse. It was replaced in 830 by the church of St. Aurelius, also aisled, with two western towers, side apses east of the transept and a projecting apsidal choir. Excavations under the bombed church on the Hohensyburg are described by Albrecht. The earliest building, a simple rectangle, was not dated by finds, but the historical evidence points to a Carolingian origin.

C. A. RALEGH RADFORD.

EXCAVATIONS AT BRAHMAPURI (KOLHAPUR), 1945-46. By H. D. SANKALIA and M. G. DIKSHIT, ix + 153 pages, 31 figs. and 37 plates. *Deccan College Monograph Series 5, Poona, 1952. Rs. 30.*

INDIAN EPIGRAPHY AND SOUTH INDIAN SCRIPTS. By C. SIVARAMAMURTI. viii + 280 pages, 133 figs. and 12 plates. *Bulletin of Madras Govt. Museum. Vol. III, 4, Madras, 1952. Rs. 14. 8a.*

The first of these is the excavation report of a dig carried out by the Deccan College Research Institute under the direction of Dr Sankalia and Dr Dikshit. This report is a welcome example of the improved excavation technique obtaining in India today, of which Dr Sankalia is one of the leading exponents. A word of criticism as regards the description of excavation and stratigraphy; this does not tie in clearly with the sections figured, the reason being that the numbers on the latter are seldom referred to in the former, a fault often found even in the reports of more experienced excavators. It is a pity also that, in such a small area, the soil sections could not also have been tied in so that certain well defined layers retained the same number throughout, cultural levels being determined independently. There is a very valuable pottery corpus of 105 types, and other minor antiquities, particularly bangles and beads, are dealt with comprehensively. Interesting comparative material is set out conveniently in the last chapter and valuable conclusions are reached with regard to the cultural history of Brahmapuri from Satavahana times when the site was first occupied to its final occupation by missionaries in 1874.

The second book should be a mine of information for students starting work on the study of South Indian Scripts; the trouble taken to produce the pedigree of each individual letter should lighten their labour considerably. Examples of all the more important South Indian epigraphs make them available without the usual prolonged search. The dating of the earliest examples is based on epigraphical not archaeological grounds, and it is a matter of considerable importance whether the inscription from Amaravati (Pl. VI, a) is to be dated to early 2nd century B.C. or 1st century A.D. It is however to the 1st-2nd centuries A.D. that the Arikamedu ostraka, with a script similar to the earliest examples, are dated by Sir Mortimer Wheeler's excavations.

D. H. GORDON.

TAVISTOCK ABBEY: a study in the social and economic history of Devon. By H. P. R. FINBERG. *Cambridge University Press, 1951. 25s.*

An abbey and a county are joined together in the title and sub-title of this important book, which shares with Mr Miller's *Ely* the honour of reviving the 'Cambridge Studies in Medieval Life and Thought'. It is, in fact, with the Life of the abbey rather than

with its Thought that Mr Finberg is concerned, and the extra-mural life rather than the life of the cloister ; *laborando* could be at the head of each page. The rôle of the abbey which he takes for minute examination is the rôle of landowner, coloniser, rentier and entrepreneur ; it is a community which owns tin mines, fisheries, pastures and corn-lands as well as shops, stalls and tenements in a market borough founded outside the abbey precinct by an abbot with an eye on business.

The importance of this book lies beyond its being a clear, tidy and practical account of a landlord's behaviour in five and a half busy centuries. This landlord owned Devon land, and the economic development of Devon has remained an uncomfortable gap in our knowledge ; where the gap had been filled by guessing some of the guesses proved wrong ; Mr Finberg showed in his paper in *ANTIQUITY*, 1949, that there were open fields in Devon, even if they had largely disappeared by the time that other counties had their enclosure troubles. From the detailed examination of the estates of a landlord who wrote things down and counted things up, Mr Finberg has been able to show how Devon was a frontier region, a county of empty spaces to which any young man could have been counselled to go west, long after the rest of England was thickly settled. He shows how its abundant uplands eased the pressure on the lowlands, so that sheep and corn were never rivals for the same acre and Devon escaped most of the consequences of that rivalry in the Midlands.

The proportions of the book and the emphasis of interest lean towards the monastery in expansion ; its last century slips by in a few paragraphs, and before we know where we are, the Dissolution is on us. Even in its decease, the Abbey has more than parochial significance. The results of centuries of enterprise and colonisation founded the fortunes of the Russells, Dukes of Bedford, stemming from John Russell whose grant from Henry VIII Burke called 'so enormous as not only to outrage economy but even to stagger credibility'. Allowing for a little rhetorical exaggeration, the Dukes have had good cause to bless Tavistock, and many who have never walked by the Tavy will know the precincts of Tavistock Square, the source of seigniorial revenues in a later age.

M. W. BERESFORD.

**THE CIVILIZATIONS OF ANCIENT AMERICA.** Selected Papers of the 29th International Congress of Americanists. Edited by SOL TAX. University of Chicago Press, 1951, and Cambridge University Press, 1952. 328 pp., numerous text figures and half-tone illustrations. Price, 56s 6d.

This volume comprises most of the papers on Middle and South American archaeology that were presented at the 29th International Congress of Americanists, held in New York City in September 1949. It is the first of three compilations covering the proceedings of the Congress. The remaining volumes deal largely with ethnological subjects.

*The Civilizations of Ancient America* consists of 37 articles by both European and American scholars. These have been grouped into four sections : Meso-America (18) ; Intermediate (Lower Central America, Colombia, and Ecuador) (4) ; Central Andes (10) ; and Comparative (5). Wendell C. Bennett's lucid Introduction surveys these major area subdivisions, treats of general and comparative problems, and traces research trends of past and present years throughout what he terms 'Nuclear America'. The Meso-American papers embrace a wide range of interests. Five deal with subjects relating to codices, glyphs, calendar, and early chronicles. Three focus on art and architecture. At least 5 others are conventional previews of recent field-work, ceramic relationships, and relative chronologies. One on pollen analysis has a cultural-geological orientation.

Four show a strong interpretative bias—all moving towards a 'prehistoric sociology'. Of these, Armillas' functional-developmental portrayal of society, economy, politics, and religion for all of Meso-America is fascinating and controversial. Termer's Maya population study, Longyear's Copan interpretation, and Shook's examination of the pre-Classic cultures of Guatemala are all more limited in scope, but are, otherwise, equally interesting.

The late Jijón y Caamaño's contribution is outstanding among those on the 'Intermediate' areas. It is one of the very few attempts at sequence cross-matching between Peru and Ecuador, and Jijón goes even farther with speculative comments on relationships with Colombian and Central American cultures. The problem he has set for himself is, at the present time, overwhelmingly difficult; and, in my opinion, his chronological arrangements of Ecuador and Peru are highly dubious. His claim that the Proto-Panzaleo periods are pre-Chavín appears to be completely unfounded.

In the Central Andean bracket I would cite Schaedel's work on Peruvian coastal ceremonial and population centres as unusually stimulating. Here, as in some of the Meso-American papers, there is evidence of a sense of problem over and beyond space-time measuring. I differ sharply with Ubbelohde Doering concerning north Peruvian chronology. The material which he discusses and illustrates is, I believe, fully consistent with a Mochica time horizon. The 'Chavinoid' elements are retentions of the earlier style—a phenomenon as common in Chicama and Virú as Doering shows it to be in Jequetepeque.

In the Comparative essays there are a variety of approaches. Strong argues the question of parallelism or diffusion with reference to Meso-America and Peru. Thurnwald's interest is in Old and New World parallelisms in political structures and the causative forces behind these. Romero and Lehmann consider historical connections between South and Middle America as these may be reflected in certain element and stylistic features. Heine-Geldern and Ekholm set out boldly in an attempt to do this same sort of thing between Meso-America and southern Asia. GORDON R. WILLEY.

WILD MEN IN THE MIDDLE AGES. By RICHARD BERNHEIMER. *Harvard University Press*, 1952. 4.0 dollars.

Professor Bernheimer has produced a most interesting and erudite study of an aspect of medieval thought which finds expression in literature and especially iconography from the 12th century at least. The wild man of the woods, sometimes insane, sometimes a sage, sometimes pretty Pithecanthropoid, was an inevitable invention in a Europe almost wholly forest save for moor and mountain, and the assarts of villagers around ham, ton and burg. The woods were unknown, the feared territory: the mendacious servant of Heriger of Mainz in the 11th century, who said he had visited Heaven and Hell, found the latter 'surrounded by very thick woods' and no doubt this part of his narrative gained credence. And in woods and savage heaths the embodiments of paganism might be found, men and women alike—*agrestes feminae quas sylvaticas vocant* as well as *pilosi*, both recognised by the compilers of penitentials as enemies to be reckoned with. (Incidentally the author, in commenting on the satyr's dance in *The Winter's Tale*, does not notice that the Authorized Version translation of *et pilosus clamabit ad alterum* in Isaiah xxiv, 14, gives the clue). There were not only the old gods in the woods however: the deep-rooted Indo-European idea of the retreat of the king to the forests for contemplation, well known in ancient India, finds its Celtic embodiment in Myrddin ap Morfyn, Lailoken, and Suibhne among the little humped brambles. The woodwose is a complex creature and this book unravels some of the twisted skeins. Some



times he is Jack-in-the-Green, sometimes a mummer: the author sees connections in the men dressed as bears and the *turpia ioca cum urso* of the ninth century, but can this be separated from the disguising as a bull-calf on the Kalends of January, the Mari Lwyd, the Hooden Horse, the Dorset Ooser and all such embodiments of the man masked as an animal?

In the chapter dealing with the wild man in his theatrical embodiment the reviewer's essay in *ANTIQUITY* 1938, 323, appears to have escaped notice, as has Raynaud's *Le Mesnie Hellequin* in the section devoted to the demon hunt, so that Driesen's harlequin theory has not been so fully worked out as it might. But in general, and especially in the German sources, the author's knowledge is obviously both wide and deep. He does not touch on one minor issue that might have been explored: how far does the Robin Hood legend embody the more virtuous aspect of the wild man tradition? The Lincoln Green, the hunting of the deer, the noble egalitarian more than a little tinged with anticlericalism—a credible figure within the mythological framework of the 'salvage wight'.

The book is attractively produced, though many of the illustrations are woefully over-reduced, and the footnotes are infuriatingly concealed at the end instead of being placed on the appropriate page. It is impossible to avoid the suspicion that this, an ambivalence of the text between a learned and a popular style, and an intermittent salacity, are part of a policy to make the book have a brisk sale to the general public. If this is a justified suspicion it does not reflect credit on the press of a major university.

Someone—perhaps Professor Bernheimer—should take the legend of the wild man beyond the Middle Ages and into our own times. In the Renaissance the discovery of real wild men in the Americas—the noble savages of a Golden Age—made him an unconscious philosopher and a conscious ideal; Lord Monboddo, more daring, found him in the woods of Angola, a 'mild, gentle and humane' anthropoid ape who as Sir Oran Haut-Ton was launched on a social and political career by Peacock. The late 19th century found him at Walden; our own has seen him in his diabolical aspect snarling from out of the *urwald*. The woodwose is in us all, inescapably.

STUART PIGGOTT.

FLINT IMPLEMENTS. AN ACCOUNT OF STONE AGE TECHNIQUES AND CULTURES. By W. WATSON. Published by the British Museum. London. 1950. 80 pp., Octavo, 13 text figures, 9 plates, Select Bibliography, Index, 3 Tables. Price 3s.

This book is a successor to Reginald Smith's book *Flints*, and is primarily an account of the stone tools of Western Europe. The text is supplemented by a large number of excellent illustrations such as we have come to associate with publications of the British Museum. The book gives a useful summary of the story of prehistoric discovery which is followed by a description of the environmental background for the cultures of the European Pleistocene and the different ways in which a time scale and dating are effected by glacial phenomena, changing sea levels, changing fauna, etc., Good descriptions of the main tool types of the Western European prehistoric cultures as well as of the stone element in the material culture of the Neolithic and Bronze Ages are also included. Reference is made to the Stone Age cultures of other parts of the world and by these and by illustration the author has sought to give the book a much wider scope. In this it must, however, be said that it is not entirely successful, failing as it does quite to throw off the confining bonds of de Mortillet's classification, a classification which, except for a small area of Western Europe, has been weighed and found wanting. A

little too much stress is also perhaps laid on the rigid division into core and flake cultures in the Lower Palaeolithic. More might have been made of the flake element in the 'Handaxe Cultures', and of the chopper element in the 'Flake Cultures.' A few minor points of criticism might be made. For example the section on raw materials might have been expanded somewhat. Fine-grained rocks are said to be 'tough' (p. 11) whereas it is the usually accepted idea that such rocks are comparatively easy to fracture by reason of their homogeneous nature and it is the coarser grained rocks which are 'tough' and are more resistant to fracture.

An important and valuable section on the fracture of stone by both natural and artificial agencies is included. A point of note, however, is that the first illustration of starch fracture (fig. 5) has been drawn so that it has the appearance of conchoidal fracture by artificial means.

On page 35 also the writer will not apparently allow to any of the early American cultures an antiquity as early as the Pleistocene.

The main classes of stone implements are admirably brought out in the excellent series of illustrations of knives, scrapers, arrowheads, polished and flaked axes, sickles, etc., though when distinguishing for example between Mousterian scrapers and knives the differentiation must of necessity be one of degree only.

*Flint Implements* is a useful guide to the typology of stone implements and is complementary to the British Museum (Natural History) Handbook, *Man the Toolmaker*.

J. DESMOND CLARK.

COPAN CERAMICS. By JOHN M. LONGYEAR III. (Carnegie Institution of Washington. Publication No. 597), 1952. *Quarto*, XIII+114, 118 figs. *Paper bound*, 5.25 dollars, *cloth bound*, 6.25 dollars.

Copan, in the south-east of the Maya 'Old Empire' is probably the best known and most thoroughly explored site in Central America. It was fully described by A. P. Maudslay, and the Inscriptions have been exhaustively studied by Morley. Finally the site has been preserved as an ancient monument by the Government of Honduras and the Carnegie Institution. In the course of these restorations, which lasted over a number of years, Dr Longyear conducted a series of excavations in the form of test pits and trenches in order to determine the ceramic sequence of the area.

As the title implies, it is a study of pottery, and thus, in contrast to the work reviewed above, an intensive study of one aspect of a well known site, but other artifacts discovered in the course of excavation are also dealt with. Dr Longyear has based his study not only on the material obtained from his excavations but also on the Large collections in the Peabody Museum at Harvard. From this material he has been able to build up a very full ceramic sequence.

The early 'Archaic' inhabitants seem, like their contemporaries in other parts of Central America, to have been a simple peasant population with no hierarchical cults to trouble them. In 'Early Classic' times, however, immigrants from the Peten came in, imposing a culture of Pyramid building and a complicated astronomical religion coupled with the erection of elaborately inscribed calendrical monuments and the building of enormous pyramids and temples. In the early phases of the 'Classic' period pottery styles followed those of the Peten, but later this uniformity, which embraced the whole Maya area, gave place to local styles. The diversity which came in is interpreted as a breakdown of centralised authority, which was replaced by local hierarchies, conforming in so far as they continued in the worship of the same gods and in the use of the same calendar, but adopting individual forms of ritual and ritual furniture.

## REVIEWS

The abundance of trade wares shows us that contact was maintained over a wide area, but Copan evolved its own variant of Polychrome ware, known as Copador ware. It generally resembles other Maya classic pottery but has some distinctive features. It is made from a soft buff-coloured paste, covered with an orange slip and decorated with bands of glyphs or rows of human figures carelessly executed in red black or dark orange. The red in particular has a characteristic sheen, produced by the use of specular haematite. The designs are carelessly executed, but show surprisingly little variation. Shapes show affinities both with the Highlands of Guatemala and with the area to the south. In this connection wide-mouthed bowls, similar to those of the Ulua valley, are particularly striking, though perhaps this is to be expected from Copan's position in the extreme south-east of the Maya area. There are also remains of 'post-classic' pottery indicating spasmodic occupation after the abandonment of the city.

Unfortunately there were very few associations of diagnostic pottery with the dated inscriptions, but relying on other associations and on the sequence of pottery at Uaxactun, Dr Longyear has produced a satisfactory relationship with the Initial Series system of dating. With a view to obtaining an absolute time scale, he has applied his sequence to that worked out for the valley of Mexico, and largely on the strength of the occurrence of 'Plumbat' ware, a late type of pottery with a natural glaze, accepts the well-established 11-16-0-0-0 correlation rather than the 11-16-3-0-0-0, which has had a number of adherents in recent years.

The method of presentation, whereby excavations, grave associations, and descriptions of artifacts are rigidly separated makes for clarity, but in a work not provided with an index, such as this a particularly good system of cross references is essential. Unfortunately this point has not received the attention it deserves. It is particularly annoying, when studying the illustrations, to skim through the greater part of the book in order to find the two or three references which the reader knows must be there. The illustrations themselves are excellent as also are the plans and sections. The whole book is of the greatest value to students of Maya archaeology, but so few people in this country are sufficiently interested in the subject that the author is unlikely to find the appreciation he deserves.

ADRIAN DIGBY.

EXCAVATIONS AT NEBAJ. By A. R. LEDYARD SMITH and ALFRED V. K. KIDDER, with notes on the Skeletal Material, by T. C. STEWART. (*Carnegie Institution of Washington Publication*, No. 594 (1951). Quarto, XII+90 pp. frontispiece, 90 figs. Paper bound, 5.25 dollars; cloth bound, 6.00 dollars.

The El Quiche district of Guatemala is relatively unknown archaeologically, especially in comparison with the Peten, the homeland of the lowland Maya. Nebaj is a large ceremonial centre, the only visible traces of which are a number of mounds, much eroded and ploughed over, near the headwaters of the Usumacinta River. But what is probably the finest known example of a Maya cylindrical polychrome vase came from this site.

Dr Ledyard Smith was engaged on a reconnaissance of the Highland Maya area when a subsidence in one of the mounds was noticed. This was correctly deduced as being caused by the collapse of a tomb roof. He excavated this with various colleagues from the Carnegie Institution, and subsequently cut a trench into another mound.

The collapsed tomb proved to be of early Classic date, containing the remains of twelve people, with rich deposits of jade, pottery and other objects. The trench dug into the mound revealed no less than eight tombs, and a number of caches with artifacts



showing continuous occupation from 'early Classic' to 'post Classic' times, a period of about 400 years.

The excavation was, in a sense, unpremeditated and the Carnegie Institution were obviously unable to divert resources from other programmes to make a complete excavation.

Consequently work had to stop before any 'pre-Classic phases (if they existed), could be investigated. Inevitably since the excavations were limited, in a large site, and in a little known area, the results are to some extent disappointing.

The chief interest lies in the artifacts. These include a magnificent collection of jades which provide for the first time a dated series for comparison with the multitude of undocumented specimens in museums and private collections. Dr Kidder contributes a discussion of the artifacts, and their relationship with material from other Maya sites. Pottery seems to correspond fairly closely to that of the lowland sites, though local forms occur. Some interesting light is thrown on the assembly of ear ornaments by the discovery of the various components *in situ*. An abundance of pyrite-encrusted plaques is cited as evidence of the wealth of the site. Similar specimens have of course been described before from Kaminaljuyu and from British Honduras and many other areas, but not in such quantities.

In the general discussion, he suggests that the highland cities were not abandoned so soon, or so completely as those of the Peten. The almost universal upheavals which disturbed the whole of central America at the end of the 'Classic' period do not seem to have reached the more remote highlands until rather later.

The whole book is characterised by the care and thoroughness which we have come to regard as the hallmark of Carnegie Institution archaeological work, and it is a valuable contribution to the subject.

ADRIAN DIGBY.

DIE FRÜHESTEN ACKERBAUER IN MITTELEUROPA. By VLADIMIR MILOJČIĆ. *Germania*, Vol. 30, 1952, part 3-4, pp. 313-18.

The paper deals with the earliest agriculturists in Central Europe and tries to define their appearance in relation to the earliest Neolithic cultures. Connecting the evidence of recent excavations (in itself already known) and rejecting some current ideas, Mr Miložić gives a fresh view of the problems involved.

Agriculture, he stresses, is not necessarily connected with a Neolithic equipment of pottery and polished axes. These may appear later: at the bases of Near Eastern 'tells' as Jericho, Jarmo and Karim Shahr, the practice of farming was obvious, but there was no pottery and mainly mesolithic equipment was found. In Central Europe, e.g. at the Federsee, pollen analysis testified agriculture in certain deposits, likewise together with mesolithic implements.

On the other hand, it is certain that Neolithic farmers in Europe grew grain and kept animals which originated in Hither Asia. So, though some form of agriculture may have been autochthonous in Central Europe since late Mesolithic times, another important root of the subsequent Neolithic farming must indeed be sought in Hither Asia. One might be tempted to connect this transference with the occurrence of painted pottery in the Near East and South Eastern Europe ('Sesklo', etc., groups). But Miložić demonstrates, how, with the Danubian pottery ('Bandkeramik'), this Neolithic farming in Central Europe was already developed before the painted pottery appeared.

However, he calls attention to a pre-painted rusticated ware: 'Impresso' or 'Cardium' ceramic. This seems to be the oldest pottery in the Near East (Ras Shamra, etc.), Greece ('pre-Sesklo'), Italy and Sicily (oldest 'Matera and Molfetta' culture),

France and Eastern Spain, and it is also known from North African sites. Consequently, one must think of a circum-Mediterranean culture giving birth to this first pottery. Pottery of very much the same type has been found in the layer of Starčevo on the Danube underneath deposits with painted sherds pointing to the 'Sesklo' group. Milošević suggests that this 'oldest Danubian Starčevo I ceramic' is due to Mediterranean 'Impresso' influence introduced by way of the Vardar-Morava Valley. The conjecture that by this way as well Near Eastern animals and grain came to Central Europe is hinted at.

The relations of the many Neolithic cultures in question are still open to discussion, and one must not blame the author for a tendency to simplify the problems they offer<sup>1</sup>. Perhaps his arguments are not all as convincing as those of Childe, dealing with the First Northern Farmers<sup>2</sup>. Nevertheless, these two papers offer a working hypothesis for those who want to investigate the penetration of Neolithic farming in Europe.

J. D. VAN DER WAALS.

A MINOAN LINEAR B INDEX. By EMMETT L. BENNETT, JR. *Yale University Press*, 1953 (London, Geoffrey Cumberlege, Oxford University Press), pp. xxiv + 119.

In this volume, identical in format with *The Pylos Tablets* (Princeton 1951), Dr Bennett has supplied a complete index of the syllabically-written words occurring on the Minoan-Mycenaean Linear B texts which were known (but undeciphered) in April 1952: these included the large deposits of clay tablets found by Evans at Knossos in 1899-1904 and by Blegen at Pylos in 1939. The incorporation of the Knossos words, rearranged in a new signary order and checked by a re-examination of the original tablets in Crete, tends to make obsolete the index published by Sir John Myres in *Scripta Minoa II* (Oxford 1952). The recurrence of many identical words at Knossos and at Pylos, and on Theban vase inscriptions, is clearly shown and proves that the written language, at least, was the same over the whole area between 1450 and 1200 B.C. Dr Bennett has added a valuable index to the ideographic commodity symbols occurring on the tablets, as well as an index of the syllabic words in *reverse* order, calculated to bring into relief any grammatical endings which they may share.

His first two volumes will now have to be supplemented to include the numerous new tablets which Blegen and Wace have found at Pylos and Mycenae during the seasons of 1952-53. By his assiduous building up of a reliable Corpus, he has greatly helped to make these Mycenaean texts ripe at last for decipherment; and it will be interesting to see how far the newest discoveries confirm the expectation, which he now shares, that his Index will be revealed to list a very archaic form of Greek.

MICHAEL VENTRIS.

<sup>1</sup> Some arguments concerning the Danubian culture, are discussed at full length by Milošević in the 33. Bericht der Röm. Germ. Kommission, 1943-50 (1951).

<sup>2</sup> 'The Origin of Neolithic Culture in Northern Europe', *ANTIQUITY*, Vol. XXIII, 1949, pp. 129-35.



## A Bunch of Japonica\*

THE PREHISTORY OF JAPAN. By GERARD J. GROOT, S.V.D. Edited by BERTRAM S. KRAUS. pp. xviii, 128, 58 plates, 11 maps, 10 by 7 inches, New York, Columbia University Press. 8.50 dollars. Cumberlege, 55s. net.

Very good index and a table of the names of all sites in Latin and Japanese writing. The author justifies his title by being quite definite that there is no palaeolithic in Japan, rejecting H. Matsumoto's claims. He is concerned with the Jomon culture, Proto-Jomon would seem to be mesolithic going back to about 3000 B.C., its bearers being mesolithic peoples of Asia driven further East by the expansion of European Neolithic. *Jomon* means 'cord' but not all wares that are classed under this name actually bear cord patterns. About 200 B.C. it was superseded by the Yayoi culture with which metal began to come in. There is a corpus of Yayoi ware by R. Morimoto and Y. Ohayashi, Tokyo Archaeology Society, 1938. The difference in style is startling. I feel as if Jomon foreshadowed the unpleasantly complicated modern wares, whereas Yayoi tends to an elegant simplicity which we also still find. The author is unwilling to concede to the Yamato race, which seems responsible for the change to Yayoi, too great a share in forming the modern Japanese. Nor does he see in the Ainu at all pure descendants of the Jomon people.

CHOSI-ZUKA. Ancient Sepulchre at Ikisan, Fukuoka Prefecture. By YUKIO KOBAYASHI. pp. 68, 6 pp. English Summary, 19 plates, 21 text illustrations, *Ancient Tumuli Research Special Committee. Japanese Archaeologists' Association. Kyoto, 1952.*

Chosi-Zuka means 'Bottle Tomb'. Fukuoka is in the North West of the South Island, Kyushu.

KINREI-ZUKA. Old Tomb at Kisarusa in the Province of Kazusa. pp. 168, English Summary 5 pp., 35 plates (4 in colour), 61 text illustrations. Published for the Board of Education, Chiba Prefecture, under the direction of PROFESSOR HIROSHI TAKIGUCHI, 1951. *Kinrei-Zuka* means 'Gold Jingle Tomb'. Kisaraku is on the bay of Tokyo opposite Yokohama.

These books go together, the tumuli are both of the class peculiar to Japan called 'Zempo Koen' (= *ch'ien fêng hou yüan*) = front square, back round, the round has added to it a kind of platform, which gives the whole the shape of a keyhole.

*Choshi-Zuka* was 103 metres long, its round was 61 metres across and about 9 high, platform 31 across and 4 metres high. Such tombs were customary from the 3rd to the 8th century A.D. This can be put in the 5th. The chamber, of local boulders, was 3.4 by 1.4 metres. The coffin was of wood, in the mound were many spear-heads; in the chamber 19 swords, three with ring heads, and ten bronze mirrors, two of *Han* date (they must have been cherished as heirlooms for 400 years), eight Japanese copies of

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\* A fortnight before his lamented death Sir Ellis Minns corrected a typescript made from his manuscript of these reviews; he could not correct the proofs, and we hope that no misprints have been overlooked. Ed.



the common '3 deities, 3 animals and zodiac' pattern. Bracelets consisted of 18 pipe beads of jasper and two comma beans, one of unusual shape. Professor Sueji Umehara directed the excavation.

*Kinrei Zuka* measured 35 metres across the round part and was originally 110 metres long. It had of course been plundered, but what was left pointed to the 8th century just before the spread of Buddhism put an end to tombs of this class. The stone chamber, about 7 metres long, contained a coffin 2 by 1 metres of stone brought 125 miles from Chichibu Hills. Of the body only a few teeth were left. The most interesting contents were eight iron swords, with bird or ring hafts, the decoration more developed than had those in Choshi-Zuka, two mirrors, one with three deities and five animals, the other unusual with four pimples, a helmet and many armour scales, bits of a lacquered bow about 6 feet 6 inches long, horse gear including belts and jingles and the gold jingles after which the tomb is called, they adorned a belt. They seem to derive from the elaborate horse gear that came from Iran in T'ang times.

KOKOGAKU ZASSHI. The Journal of the Archaeological Society of Nippon. Vol. xxxvi. Numbers 3 and 4, September and November 1950, 8 by 6 inches, about 64 pp. each. Short English summaries, not very helpful. National Museum, Tokyo. This is the old established *Antiquaries Journal* of Japan.

Number 3. Three articles with English summaries. 1, Excavation of just such a tomb as those described above, at Minemura on the Island of Tsushima, by Heijiro Nakayama; strangely enough it contained bronze, iron and stone swords together.

2, Temple site of the 6th century, Teramoto, Tamarasi, Kosu, just East of Fujiyama, by Mosaku Ishida.

3, Kitchen Midden at Shimo-Ono, Chiba Prefecture, Middle Jomon period, by M. Emori and others. Poor illustrations, save for a good frontispiece of a glass bowl, perhaps Western referred to Hoko period A.D. 596 at Sairinji Monastery, Osaka Prefecture, and a plate of things from Minemura.

4, S. Eliseev 'La Mongolie dans l'Antiquité' mainly founded on S. V. Kiselëv's paper in Russian. Palaeolithic sites at Altan-bulaq, Shabarakh-usa and Tsaghnam Nor make a bridge between Malta and the Angara and the Mousterian on the Great Wall. For the bronzes he refers us to Karlgren, *B.M.F.E.A.* 17. There is a small but useful map and a good French summary. The rest is taken up with an account of the Moyoro Kitchen Midden, in Hokkaido; the people in some ways resembled the Ainu, they are dated by Chinese things of the 10th century; also an excavation of neolithic in Aomori Prefecture in the North of Honshu leading to Jomon culture.

KODAI GAKU-PALAEOLOGIA. Volume 1, numbers 2 and 3, April and July, 1952, i.e. 4 parts yearly: 10×7 inches about 100 pp. in each part, one or two plates and many illustrations well produced. Price 80 dollars each.

Osaka, the Palaeological Association of Japan, by Palaeology they seem to mean 'Antiquity'. Number 2 only table of contents in English. *Inter alia* I should like to read T. Esaka—*Origin of Primeval Culture of Japan*. B. Tsunoda, *Reminiscences of A. M. Tallgren*. Then comes apparently a good survey of recent finds in West Asia by S. Mitsumori and others. 12 pp. of Reviews.

Number 3. H. Oshibuchi. Rain-prayer cult of early Mongolians; Y. Suematsu, the location of the Chênfan district in Korea under the Han. H. Mori, Statuary at Daianji Monastery. Then 15 pp. in German and English on the life of the Polish

## ANTIQUITY

Classical Scholar Zielinski, died in 1944. Next S. Umehara on T'ang-style Mirrors recently investigated in Japan. Each is figured side by side with a similar specimen found in China. Pages 244-76 are given up to remarkable summaries of Russian literature under the guidance of B. Tsunoda, work by Kiselëv, Sosnovskii, Okladnikov, especially on the R. Selenga, by Bernstamm in Semirechie, by Jacobson figuring things from Mongolia in Copenhagen, and the exploration of old Ryazan part of the Russian attention to Mediaeval towns that corresponds to our work at Southampton and Thetford. A review by R. Umeda, of H. Bengtson, *Einführung in die Alte Geschichte* finds great fault with the author for practically confining it to the ancient history of the Mediterranean region from the time alphabetic writing was invented. He also blames him for not using Russian work.

TOHOGAKU—Eastern Studies. *Edited* (i.e. published) *by the Institute of Eastern Culture, Tokyo.* No. 4 July, 1952. 8 by 6 inches, pp. 111 Japanese, 6 in English. Price 300 yen, per annum.

*Inter alia* S. Umehara, two kinds of bronze musical instruments used in North Indo-China (illustrated).

T. Toda, Origin of *Tso-chuan*. T. Yamamoto, Members of Han Lin under T'ang and Sung; K. Tasaka. Islam in Champa=history of Islam in South Asia. M. Honda, The Thirteen Kuriyen (clans) under Chinggiz Khan. There are fair English abstracts.

This seems almost the first production of an important Society. The officers of it, well known names among them, are enumerated on the fifth page and on page six.

E. H. MINNS.

## CORRIGENDA

p. 65, line 19 and PLATE IV: for 'inscribed stone' read 'clay tablet'.

p. 103, last line: for 'PLATE III' read 'PLATE IV'.

We regret these Editorial slips in Mr Dikaïos's note.